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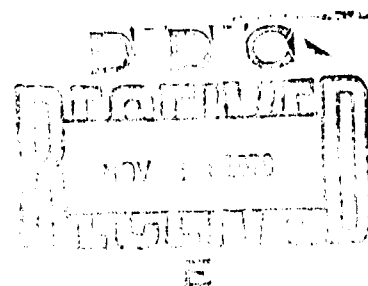
INITIAL ARYEP VALIDATION RESULTS: 1974-75

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LEVEL II

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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) The report presents the results of an ARI survey conducted in conjunction with the TRADOC Combat Arms Training Board initial validation of the ARTEP in 1974-75. The tests were conducted with units of the 9th Infantry Division and 1st Cavalry Division using test editions of ARTEPs 7-45 and 17-35. The data sources used in the survey included records of interactions between TRADOC and participating personnel, published test directives, observation of the exercises,		

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interviews and/or questionnaires administered to all participants, and review of unit After Action reports. Based on the above, a series of recommendations were made for revisions to the ARTEPs.

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PREFACE

This report was prepared for the US Army Combat Arms Training Board (USACATB) by the Army Research Institute (ARI) as part of the Technical Advisory Service (TAS) support provided in conjunction with the TRADOC ARTEP Validation Study. USACATB is the TRADOC action agency, being assisted by representatives from the US Army Forces Command, US Army Infantry School, US Army Armor School, and HQ TRADOC.

ARI was supported in its portion of this effort by the American Institutes for Research under contract DAHC19-73-C-0022. This support included assistance in developing study objectives, design of data collection instruments, and data analysis and interpretation. Overall program management, data collection, and official reporting are the responsibility of USACATB.

This report contains findings, conclusions, and recommendations of ARI based on the analysis of the data. It does not necessarily represent the views of any other US Army agency or agencies.

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SECTION 1.0 EXECUTIVE SUMMARY

1.1 Purpose

Army Training and Evaluation Program

The purpose of this report is to present the results of the (ARTEP) validation effort conducted by the Combat Arms Training Board. It includes recommendations for changes to ARTEPs 17-45 and 7-35, revisions to the ARTEP concept, and recommendations for changes in the overall training system as well.

1.2 Background

During the period September 1974-February 1975 the Combat Arms Training Board with assistance from FORSCOM, USAIS, USAARMS, and ARI, conducted an extensive examination of the feasibility of ARTEP implementation. During this time two active Army units, the 9th Infantry Division and the 1st Cavalry Division, trained and were tested under the test editions of ARTEPs 7-45 and 17-35. The validation team monitored the activities of the training and testing of these units under ARTEP to determine what changes or revisions in the ARTEP concept and documentation were required to make it an effective training and evaluation program.

1.3 Approach

At the outset of the validation effort a general set of ground rules for conducting the validation effort and a detailed set of validation objectives were defined. The three primary objectives were to:

- Assess the effectiveness of the ARTEP as a guide in planning and conducting unit training.
- Assess the effectiveness of the ARTEP as an instrument for evaluating unit proficiency.
- Determine the effect of the FORSCOM Letter of Instruction on the training and evaluation conducted under ARTEP.

The guidelines for conducting the validation included the following:

- There was to be a minimum of guidance and direction provided to the implementing units so that test of the ARTEP document would remain as uncontaminated as possible.
- There was to be a minimum of interaction with the test units during their training for ARTEP.
- Observation during the evaluation phase was to be on a piggyback basis utilizing existing support rather than requiring separate or additional support.
- No external controls could be imposed on the training and evaluation in order to maximize validation data collection.

These ground rules were intended to minimize interference with the unit and to keep unit support expenditures associated with ARTEP to a minimum.

The primary data collection methods employed were:

- Records of observations and of interactions between validation team members and the test units during the training phase, to include evaluator training.

- Review of materials published by the test units in connection with ARTEP training and evaluation phases.
- Observation of ARTEP evaluation by members of the validation team, to include independent assessment of task and mission performance.
- Post evaluation interviews and questionnaires with ARTEP participants at all levels.
- Review of unit after action reports on ARTEP.

1.4 Conclusions

This section presents the major conclusion derived from the validation effort. It is based on the implementation efforts of two test divisions, each one applying both the armor and mech infantry ARTEPs. The detailed analyses of the questionnaire, interview, and observational data for each division effort are contained in Sections 2.0 and 3.0. These conclusions are derived from the combined results of those two efforts and apply equally to both ARTEP 17-35 and 7-45.

(1) The ARTEP Level 1 mission statements represent, with minor required revisions, valid performance criteria for armor and mech infantry battalions to be considered combat ready.

(2) The standards of performance stated for ARTEP missions, require revision. They are inaccurate in some instances and too general and vague in many others, requiring individual rater judgment to a greater extent than necessary. Such heavy reliance upon individual evaluators (whose

qualifications vary considerably) leads to a lessening of ARTEP validity and reliability.

(3) There is an extensive amount of overlap between the armor and mech inf ARTEP documents when examined for substantive differences. A single combined document would permit gains in economy by eliminating duplication present in two separate documents and gains in convenience by eliminating the current need for units to have both documents to conduct missions when cross-attached. A single combined arms ARTEP would satisfy both needs, without any resultant disadvantages.

(4) The ARTEP provides a clear, general basis for directing training into effective channels. It does not, in and of itself, improve training methods. It helps eliminate irrelevant training and fosters performance oriented training. However, training for ARTEP was largely accomplished by applying traditional techniques (guided by ATPs and ASubSchedules) but on a more intensified basis with higher priorities and more resources for training made available. Therefore, its utility as a training program is, as yet, inconclusive. Work is still required on the development and promulgation of the training methods that are necessary to support ARTEP training.

(5) The level of resources (time, equipment, personnel) required for a unit to train to be able to meet ARTEP standards show that it is very expensive to train for combat. The four units involved in the ARTEP tryout were given priority consideration on facilities, supplies, resources, and relief from interfering missions. The general opinion was that such priorities were necessary in order to properly prepare.

While the level of support provided was probably somewhat inflated due to the perceived importance of the ARTEP tryout, it is evident that training resources and priorities will have to be considerably increased for Army units that are to achieve and maintain a minimum state of combat preparedness. This increase in resource requirements is a function of the increase in the accuracy of the combat missions and standards. Given the validity of the ARTEP missions, meaningful cost comparisons cannot be made with earlier programs that did not employ such standards. With ARTEP, however, future programs can be evaluated against a common baseline of achievement standards which will permit accurate assessment of cost-effectiveness.

(6) The ARTEP in its present form is not a standardized test instrument. That is, there is no reason to expect that different units would be evaluated under the same conditions when using ARTEP guidance and standards. The standards are too subjective; evaluator performance was too erratic and it is doubtful that typical evaluator personnel could be adequately trained to meet standardization requirements; there is no standardized guidance as to how to relate task performance to overall mission performance; and there are no guidelines for adjusting standards to account for varying test conditions.

If sufficient adjustment in ARTEP and its administration procedures were made so as to make it a standardized test instrument, it would likely have a negative impact on its validity as a training guide. This is due to the increase in situational artificiality often required to achieve standardization. Such alteration to test validity would decrease its value as a training analysis tool, as discussed below.

(7) The ARTEPs greatest potential value is as a training analysis tool. To be fully effective, however, the feedback mechanism from testing to training will have to be improved. One change that would assist in this would be to modify the overall implementation concept to permit the results of the ARTEP evaluation to be used for correction of identified deficiencies. Following ARTEP, units turned away from training. Since the ARTEP evaluation represented the culmination of their training, the units were then scheduled to undertake various non-training missions, such as post details, Reserve training support, etc. For ARTEP to be of full training value, the units must continue training after evaluation so that the identified deficiencies can be corrected. A revised ARTEP implementation concept is required that will not only permit this, but will also take into account the level of turnover experienced in combat arms units. (ARTEP units were receiving new and replacement personnel throughout the training and evaluation phases, with one unit reporting 40% new personnel in two weeks preceding its evaluation.)

Another factor affecting feedback quality is that at present, ARTEP evaluations, being oriented to mission accomplishment, do not of themselves generate diagnostic analyses. Evaluators can provide such information, and many did; however, it varied considerably in quantity and quality. After the ARTEP evaluations, some unit commanders felt there was not enough detailed information available about the specifics of their unit's performance so that they could effectively direct further training. It is important that evaluators be trained in identifying and documenting factors contributing to mission performance deficiencies,

otherwise the major benefit of the evaluation will be lost.

The standardization problems affecting ARTEP as an evaluation instrument do not degrade its value as a training analysis tool for any given unit. In the latter application, errors made in terms of being too critical are tolerable, even desirable. In the former application such error is not tolerable and the pressure is to be undercritical.

(8) The standards prescribed in ARTEP for levels of training readiness (C1, C2, C3) need to be validated. It was generally estimated by respondents that it would require approximately eight weeks of training for typical units today to reach Level 1 standards, even under conditions of improved turnover and training priorities. This appears to be much longer than anticipated in ARTEP, however, the baseline level of units (when starting training) in ARTEP terms is not known at present.

(9) The ARTEP is widely viewed as an opportunity for objective and unbiased evaluation of the training status of units. If the results of the present ARTEPs are used for official readiness reporting this objectivity will be lost. Neither the relationship of ARTEP evaluation results to combat readiness nor the procedures for properly accounting for other contributing factors are well enough defined at present to permit fair and accurate use of ARTEP results for this purpose. Consequently, such use would foster compromise in readiness reporting which would adversely affect training as well as actual Army readiness overall.

An ARTEP evaluation could only be used for determining readiness ratings if:

- results could be reported with impunity and an opportunity provided for corrective action to be taken.

-- the level of training priority and resources required for a unit to achieve and maintain a C1 type status be recognized. If such resources cannot be provided, then a commander cannot be expected to achieve such a status.

-- the test standards are improved and their objectivity increased.

-- evaluation procedures are upgraded to include standardized evaluation and increased use of engagement simulation techniques.

(10) The implementation of the ARTEP by units in this validation effort involved considerable trial and error and diversity in approach. Undesirable inefficiency and diversity could now be considerably reduced through a more controlled implementation program. Experienced advisors could impart lessons learned and identify effective and ineffective approaches. If left relatively unguided, as was intentionally done for validation purposes, units will flounder unnecessarily to no one's avail. The experience gained to date should be capitalized on to guide future implementation.

1.5 Recommendations

1.5.1 Recommendations for ARTEP Revisions

(1) Revise the missions, standards, and conditions in ARTEPs 7-45 and 17-35 in accordance with the changes presented in Section 4.0 of this report.

(2) Remove the guidance for establishing levels of training readiness from ARTEP. Such guidance requires further validation and could more appropriately be set forth in other documents when developed.

(3) Separate multiple evaluation standards so that they are not compressed into a single paragraph which requires one rating of satisfactory or unsatisfactory.

(4) Expand the guidance contained in ARTEP on how it is to be employed for training and evaluation and include sample schedules, programs, scenarios, etc.

(5) Develop a standardized training program for evaluator training that fully explains ARTEP, relevant tactics, and the evaluator role and how to perform it to include identification of training deficiencies.

(6) Give consideration to lengthening the FTX portion of the ARTEP so as to more realistically tap staff and support element functioning and to provide adequate time for planning and full execution of missions by tested units.

(7) Develop procedures for adjusting ARTEP standards to deal with variations such as understrength units, adverse weather, and other unusual conditions.

(8) Increase the size of aggressor forces to permit realistic representation of threat and increase and improve casualty assessment by evaluators so that exercises will more realistically test commander's reactions and decision making.

1.5.2 Recommendations for ARTEP Implementation

(1) Upon completion of the revisions recommended in paragraph 1.5.1 above, the new ARTEP should be implemented for training purposes in all appropriate active Army units with guidance provided based on experience gained to date.

(2) The ARTEP should not be used as the basis for evaluating combat readiness unless adequate provision is made for permitting correction of deficiencies found in the evaluation, standardization of test conditions, and taking into account factors affecting training over which the commander has little or no control.

(3) The priority and resources required to train for combat missions must be recognized to permit maintenance of at least minimum acceptable levels of readiness. A general implementation concept should be developed that reflects these requirements and permits systematic utilization of ARTEP evaluation results for remedial training and provides for dealing with current and anticipated levels of personnel turbulence.

(4) Training literature dealing with tactics, training management and "how to do it" information, should continue to be produced on a high priority basis, and adequate production and distribution to lowest unit levels insured.

1.5.3 Recommendations for Further Study

(1) The respective combat missions, conditions, and standards contained in ARTEPs 17-35 and 7-45 should be examined for commonality, and consideration given to combining these two ARTEPs into one document. A preliminary version of such a document has been produced for study and is included as Annex E to this report. If feasible, such a document would facilitate field use and eliminate extensive duplication that now exists.

(2) Development should continue on methods for incorporation of engagement simulation techniques (SCOPES, REALTRAIN, MILES) into ARTEP training and evaluation. The use of such techniques, when guided by unit performance assessment criteria also under development, represents a promising alternative to the present use of subjective expert judgment.

(3) Efforts should be initiated to further examine the relationship between training readiness and combat readiness, to include validation of training time estimates and development of data requirements. Such efforts should be done in coordination with any future changes in the ARTEP and its implementation concept to insure that readiness data collection is accurate and does not degrade training.

(4) Examination should be continued of alternative methods of ARTEP utilization to increase its efficiency and effectiveness. For example, the realistic nature of random sampling exercises (subtests, subscenarios) suggests that these procedures may be readily implemented at the unit level to provide commanders with the capability of evaluating units during training. Adaption of the random sampling exercises for use in small unit training and evaluation would also overcome a basic problem associated with using random sampling during the ARTEP evaluation. That is, the random sampling procedures were viewed as being very costly. By integrating such procedures into unit training continuous and long-term amortization of costs could be achieved.

SECTION 2.0 9th INFANTRY DIVISION ARTEP VALIDATION RESULTS

2.1 Background

Two units of the 9th Infantry Division, Ft. Lewis, Washington, participated in the test application of the Army Training and Evaluation Program (ARTEP) during September-October 1974. The 2nd Battalion 77th Armor trained and was tested under ARTEP 17-35 (Armor) and the 2nd Bn(M) 60th Infantry trained and was tested under ARTEP 7-45 (Mechanized Infantry and Combined Arms).

The ARTEP was perceived by the Bn as its highest priority mission at the time, since the Bn was to receive its official FORSCOM readiness evaluation based on its performance in the ARTEP evaluation. Conflicting requirements were therefore held to a minimum. The Bn was displaced from Ft. Lewis to Yakima Firing Center for the entire training and testing period which aided in reducing distractions from training. This was its only mission during this time. The particular training situation for the two 9th ID units testing ARTEP differed greatly between the two units however. The 2nd Bn 60th Inf. (M) had approximately seven weeks available to it to train prior to the evaluation phase of its ARTEP. The 2nd Bn 77th Armor had a conflicting high priority mission. It was engaged in annual gunnery qualification up until two weeks prior to its ARTEP evaluation phase. Consequently it had only two weeks to focus on training for the ARTEP missions.

The primary sources of data regarding the 9th ID ARTEP tryout were the observations of the validation team members and their discussions

with participants, written memos generated during the course of the preparation for ARTEP, and after action reports of the participating units and validation team members. The structured interview data obtained was generally less complete than hoped for due to logistic difficulties experienced by displacement of unit personnel back to Ft. Lewis immediately following their ARTEP, as well as the departure of TDY evaluator personnel to widely dispersed home stations. Of a total of 76 interviews that were planned, 48 were able to be conducted.

Significant inputs from those interviews are contained in the discussion of results which follows.

2.2 Discussion of Results

The description of the findings associated with the 9th ID ARTEP tryout is organized on the basis of the objectives of the validation plan. Following each major objective is a brief summary of the overall findings for that objective. Then the detailed subobjectives of that objective are discussed in further detail in terms of the findings from the data collection effort that bear on it. While general implications for changes to the ARTEP may be indicated, specific change recommendations are contained in Section 4.0.

2.2.1 Objective 1 To assess the effectiveness of the ARTEP as a guide in planning and conducting unit training.

Summary

The opinions of the personnel of the 9th ID at virtually all echelons was that ARTEP did provide a common set of objectives, generally agreed upon as relevant and valid, upon which training could focus. This is particularly valuable to junior and inexperienced personnel who in the past have been trying, largely unsuccessfully, to determine what it was that they were expected to accomplish.

The ARTEP, however, was not sufficient, in and of itself, to permit effective training to be developed and executed at all levels or by all personnel. The assessments of inexperienced leaders as to the training status of their personnel were frequently judged inaccurate by their superiors. They tended to train directly toward terminal objectives rather than incrementally employing intermediate type objectives. As a consequence training tended to be heavily centralized at the battalion and higher levels, since they felt that training was not being organized and conducted properly at the lower levels.

To the extent that well defined missions and standards permit effective training, ARTEP is effective as a guide in organizing training. It in itself, however, does not provide sufficient detailed information to insure that training is properly conducted. It is probably not the function of the ARTEP to provide "how to train" information; this is more properly the role of the training circular. To the extent that recent ones were available they were utilized.

More guidance should be provided as to how to use the ARTEP in conjunction with available training literature in order to assess training requirements, organize and conduct training for ARTEP missions, and to measure progress. This should be incorporated into Annex H so that the interface with training literature is clear. Further emphasis should also be placed on the need for decentralized training so that individual units can allocate their time and resources more efficiently. Battalion should serve as a training consultant not as a training dictator. It should validate individual company needs and programs rather than give one overall schedule to all. To the extent this was done training was perceived as more effective.

If junior leaders are not able to effectively plan and organize training they will not become so by being given standardized programs. There must be room in the ARTEP concept for individual efforts at training program development even though initial efforts may be lacking. In this initial effort at implementing the ARTEP there appeared to be too little freedom given to company commanders. In the 9th Div. this tendency may have been exacerbated by the presence of the ORTT evaluation.

The subobjectives investigated under Objective 1 are discussed in detail in the following sections.

Subobjective 1.1 To determine if commanders were able to develop training programs to achieve the stated ARTEP objectives.

- a. Was the ARTEP used as the basis for developing training schedules at each command level?
- b. Were the battalion and subordinate element missions/tasks adequately specified in the ARTEP?
- c. Were the conditions under which unit elements must perform adequately specified in the ARTEP?
- d. Were the standards of performance for unit elements adequately specified in the ARTEP?
- e. Were training priorities established based on commander estimates of current proficiency on the missions/tasks included in the ARTEP?
- f. Were priority unit mission/tasks established by higher command levels and if so were they adequately communicated?
- g. What local training management documents i.e., training circulars, training schedules, training notes, etc. - are required to support ARTEP training management within the division?
- h. Was the responsibility for scheduling and conducting the required training delegated to the lowest possible command level?
- i. Did units train differently under ARTEP than previously?
If so, was the training more effective?

Discussion

While unit commanders indicated that ARTEP was one of the primary inputs to establishing a training program it was also indicated that it

was difficult to discern what was most important and that the ARTEP contained vague statements of standards. This latter point was to become of increasing concern when applying ARTEP to unit evaluation. While most respondents indicated that the missions, standards, and conditions were "completely clear," significant comments on areas requiring greater delineation were suggested.

There was considerable difference of opinion among levels of respondents as to the level at which training should be directed or centralized. In the 9th Div training was centralized at the Battalion level with Brigade also making inputs. In general each level from platoon through battalion felt that it should be permitted greater flexibility and autonomy in training its personnel. The view at battalion level was that company personnel did not have the time or experience necessary to properly organize training. It was indicated by battalion personnel that company organized training tried to proceed too quickly to final performance objectives and did not properly develop and attain intermediate objectives. The companies pointed out, on the other hand, that battalion developed training tended to overemphasize selected problems at the expense of others and that a more individualized focus is required.

If the perception of battalion level personnel that company level personnel are too inexperienced to conduct proper training is correct, then it would seem that they need more experience and guided practice in developing training, not centralized training development. The S-3 and G-3 sections should perhaps focus more on consulting and critiquing the companies rather than directing their training. There should be

room for such learning on the part of company and platoon leaders in ARTEP. It may be that the pressure generated by the FORSCOM ORT's evaluation being part of the ARTEP prevented this from taking place in the 9th Div. It is not an uncommon occurrence, however, and ARTEP guidance should point out the importance of training tailored to lowest level units possible and the need for junior leaders to be allowed to gain experience even if they must fall short in their initial efforts.

The primary supplementary documentation that was produced by the division in support of ARTEP was that associated with the evaluation phase. Extensive materials dealing with test administration, scenario, implementing instructions, etc., were produced by the Plans Evaluation Group (PEG). Training support materials consisted of administrative schedules and instructions based upon battalion directed programs. While there is a need for a number of training circulars dealing with training, tactics, and ARTEP, there was no need identified for additional documentation from division level other than that provided.

While the lowest level at which inputs to the training were made apparently varied across companies, there was a consistent response that training was conducted at the squad level. There was a very favorable attitude expressed toward training wherein inputs could be made from the squad and platoon level and enthusiasm for the increased small unit training that occurred in preparation for ARTEP. This interest and enthusiasm, however, did not translate into across the board high performance in the test phase. There were a number of intervening variables that operated to negate training benefits - the main ones being turnover (squads

were receiving new men during the ARTEP exercises) and under-strength squads. The latter degraded performance because standards (target hits required; number of aggressors) were not adjusted for under-strength units. Future edition of ARTEPs will have to address this problem.

The training was perceived as vastly different from previous training by most respondents and this difference was considered positive. In general the training was felt to be more mission specific, of greater overall relevance and permitted companies to train as units. Most importantly it made the individual squad members feel that their role was important and that people were interested in their performance. The shortcomings noted by participants about ARTEP training were that it did not provide procedural detail or how to train understrength units and more detail was needed on the conditions for performance of the missions. The point about procedural detail is important from a training standpoint. It is certainly required for training. The question however is how is it best provided--via ARTEP, training literature, or the individual expertise of the trainers. Providing it in ARTEP runs the risk of returning the evaluation phase to a detailed checklist format, the avoidance of which has been a main objective of ARTEP; therefore the ARTEP document itself should probably not contain such detail. It was widely expressed that junior leaders do not have the depth of knowledge necessary to train in procedures. Therefore the training literature program must continue to improve and provide the procedural detail for training. ARTEP must remain the set of common criteria for training and testing and improvements must focus on the clarity and validity of those standards rather than on increasing procedural detail.

Subobjective 1.2. To determine the degree to which the ARTEP enables unit commanders to identify required training resources.

- a. What references, training literature were requested as a result of ARTEP?
- b. What references, training literature did the units receive?
- c. How were references and other training literature such as FM 21-6, TC 21-5.1 and TC 21-5.2, used during the conduct of ARTEP training?
- d. What support in the way of equipment was requested to conduct ARTEP training?
- e. What type terrain was requested and for what period of time?
- f. How much training time did unit request to prepare for ARTEP evaluation?
- g. How were equipment, terrain, and training time requirements determined?

Discussion

Unit commanders indicated that little or no difficulties were experienced in determining what training resources were required in terms of references, equipment, time and terrain. The references most commonly requested were FM 21-6 and TC's 21-5-1&2, dealing with how to organize, conduct and manage training. These along with specific references on techniques were used to determine training requirements, plans and prepare training, and to assist in evaluating training results. The shortcomings

in references that were indicted dealt with some shortage in supply which hampered availability and areas not yet covered by references. Included in this latter category are materials needed on ARTEP concept and philosophy, new tactical concepts, and squad training techniques for squad leaders.

Equipment requirements were generally predicted and met without difficulty. It was pointed out that a consolidated list of equipment required for training under ARTEP would be useful. One particular area of equipment problem was concerned with obtaining equipment to support SCOPES training. This was attributed to its newness in the inventory and a shortage in equipment availability. These problems should decrease over time as the equipment becomes available.

The definition of terrain requirements was not considered a problem. The available terrain has to be used and there is generally little choice as to type at any given location, especially for Armor. There was more concern expressed as to the impact of terrain on the ARTEP mission and standards. It was pointed out that there should be some means for adjusting standards and tactics based on terrain. While it may not be feasible to anticipate all possible environments in the ARTEP, guidance for evaluators should be developed on this matter.

Available training time was as equally constrained as terrain. Commanders used all the time available and generally wanted more than was available. Because of the administrative constraints involved there was no clear cut information available from this ARTEP as to how much training time is required for ARTEP training. A desire for a breakout of training time was indicated, however, this is not considered appropriate since units

presumably have unique training requirements based on their personnel and experience. The issue of training time is further explored in the discussion of subobjective 1.4.

Subobjective 1.3 To determine the degree to which the ARTEP leads unit commanders to employ performance oriented training techniques.

a. Were the objectives of training adequately communicated to all unit elements undergoing training?

b. Were performance oriented training objectives established for the battalion and subordinate elements?

c. To what extent did unit elements practice the objectives established for training?

d. What training techniques other than the practice of objectives were employed?

e. Were standards of performance set for unit elements and used as basis for progression through training?

Discussion

The ARTEP objectives provided a more performance based orientation to the training that was conducted and reduced non-mission-essential training. There is no direct evidence that the training was any more performance based than previously (indirect evidence is in Section 1.4 in terms of increased range and equipment requirements), only that it was more accurately focused. A large proportion of respondents indicated that training objectives based on ARTEP and past experience were established down to platoon and squad levels.

It was pointed out that the mission orientation of the ARTEP objectives tended to focus training at higher unit levels (battalion and company) at the expense of platoon and squad training. There was

insufficient time made available to correct known or discovered squad weaknesses. This problem is related to the centralization of training issue. Also, the emphasis on the importance of trained squads and platoons as the essential ingredients of effective units may be being masked by the ARTEP mission focus. Responses indicate that training progression is still heavily based on a fixed schedule rather than on achievement of objectives. This is probably due to two causes--one, the perceived need by higher HQ for units to cover all training in the time available; and two, an inability to accurately assess training achievement on the part of the individual unit leaders. These problems are somewhat circular and interrelated. They do need to be addressed, however, in order to achieve performance based training at the lowest levels of unit training.

Subobjective 1.4 To determine the personnel and resources required to support training under ARTEP.

a. Were the requirements for ranges and maneuver areas increased or decreased in training under ARTEP?

b. Were ammunition requirements increased or decreased in training under ARTEP?

c. Were requirements for equipment, vehicles and POL increased or decreased under ARTEP?

d. Were requirements for classroom facilities increased or decreased under ARTEP?

e. Were requirements for training devices increased or decreased under ARTEP?

f. How much time was available for units to do ARTEP training?

g. What steps were taken at each command level to insure that the maximum amount of time, resources, and personnel were made available for training?

Discussion

Training under ARTEP increased the requirements for range and maneuver areas, equipment, and supplies over previous training according to those respondents queried on the subject. There were increased requirements for mines, sandbags, camouflage, barrier equipment, SCOPES equipment, POL and ammo. This would seem to indicate more performance based training as pointed out in the discussion in the previous section. The only items which were indicated as being in short supply were ammo, SCOPES equipment, and engineer barrier supplies. Most respondents indicated a concurrent decrease in the requirement for classrooms due to increased practical work. One respondent indicated an increase in classroom requirement so that seminars could be held with the attached Armor unit on tactics so that they would develop a common understanding.

Perhaps the most important implications of the ARTEP tryout are those concerned with time required for training. The 9th ID was tested at C1 level of readiness which is defined as being ready for combat deployment. The estimates of 9th ID respondents as to the time required for an active Army unit to reach that level ranged from one to three months. The implication of this is that 9th ID units are typically at a level C3 or lower of training readiness by ARTEP definition. Only the units that had 7 weeks to train indicated that that amount of time was sufficient. It must be recognized also that higher than normal levels of interest, support, and non-interference were experienced by these units during the ARTEP tryout. Such special consideration could probably not be granted to units on a routine basis under present priorities. The overall conclusion

has to be that adequate training to achieve combat readiness requires extensively greater attention and priority than it has been given in the recent past. While improvements in training techniques and experience can help reduce preparation time, the overall priority of the training must be raised considerably. Further, to maintain a trained status a more realistic training progression must be developed which takes into account personnel turnover and permits a unit to build on its training assessment experience in ARTEP rather than to drop training at that point and begin over months later.

Subobjective 1.5 To determine the adequacy of ARTEP as a guide for conducting multilevel and combined arms training.

- a. Were subordinate elements of the battalion trained concurrently, i.e., on a multilevel basis?
- b. How was the training of the battalion and subordinate elements sequenced?
- c. Were combined arms attachments made in conducting ARTEP training?
- d. Was the time for training sufficient after cross-attachments occurred?

Discussion

The training conducted in preparation for ARTEP tended to follow some version of concurrent multi-level training rather than a sequential progression from squad to platoon, company, and battalion. This was done apparently more in response to the time pressures associated with ARTEP training than to any ARTEP driven or prescribed procedures. ARTEP directly lead to or fostered multi-level training only in the sense that there were missions specified for evaluation at each level. Beyond that there was no indication that the ARTEP particularly helped or hindered the employment of multi-level training.

The ARTEP missions, on the other hand, did require a significant amount of combined arms training. The most common cross attachments for training occurred between tank and infantry units with other infantry and armor cross attachments made with artillery, engineer, air defense, maintenance, Redeye and helicopter units. The estimates

as to the amount of time needed for combined arms training prior to ARTEP evaluation ranged from 2 to 10 weeks. Nine of ten respondents indicated that they had too little training time after cross attachment in preparing for ARTEP. It was also indicated that cross training required reference to both ARTEPs 17-35 and 7-45.

This latter point led to a review of the two ARTEP documents to determine the nature and extent of similarity between the two. It was found that the majority of the differences were in format, wording or extent of description rather than in substantive differences. The only substantive differences existed in rifle and anti-tank squad missions that were not appropriate for tank units and tank gunnery which was not appropriate for mech units. Due to this extensive overlap a prototype combined ARTEP was produced and is recommended for adoption. It is felt that such a document would facilitate cross training and more accurately reflect the real world environment wherein pure tank or pure mechanized infantry missions are seldom anticipated.

2.2.2. Objective 2. To assess the effectiveness of the ARTEP as an instrument for evaluating unit proficiency.

Summary

There was considerably more attention given to the ARTEP as a testing and evaluation vehicle than to its utility as a training vehicle. There was also more critical comment focused on it from this standpoint. This situation may have been heightened by the previously mentioned fact that the unit's readiness evaluation was being given as part of the ARTEP tryout. This tended to increase concern about the missions, standards, and conditions as well as about the judgments of the evaluator personnel.

On balance, however, the overall conclusion must be made that the ARTEP as an evaluation tool is much less adequate than as a training tool. Its primary weakness is in the lack of well defined standards and the almost total reliance on subjective judgments of evaluators. The former can be corrected by diligent review and revision. The latter is much more difficult to overcome. New objective assessment techniques are required to include engagement simulation. A rational connection has to be specified between task performance and overall mission performance, aggressor activity has to be improved, and evaluators have to be trained to apply consistent, reliable criteria.

While these improvements are being made, the pressure to revert to checklist, procedural type evaluations will have to be withstood. Because ARTEP evaluation techniques have not been well developed as yet there is an understandable desire to revert to this alternative known method of evaluating performance. If such checklists are

introduced into ARTEP, albeit on a stop-gap or interim basis, it would be most difficult to remove them.

These drawbacks are pervasive of the whole ARTEP but apply to a greater extent at the battalion and company level operations. These larger operations are severely understaffed with evaluators. One or two people cannot properly position themselves to observe the necessary events that affect outcomes. The problem diminishes as the size of the operation is reduced. The situations that have the most potential objectivity at this point are the live fire and SCOPES exercises. Problems exist in these evaluations at present, however, that reduce their evaluation value.

While most respondents agreed that ARTEP evaluation was an accurate indicator of unit combat proficiency, there were extensive recommendations made for alterations to the mission, standards, and conditions as stated in the T&E outlines. The specific recommendations for ARTEP changes that are considered to improve the validity of the ARTEP are contained in Section 4.0 of this report.

An important issue which surfaced in the context of standards was the issue of training readiness vs. combat readiness. Training readiness is a sub-set of combat readiness in that the latter encompasses factors such as material and personnel availability, equipment status, and unit strength as well as training status. A unit can be fully trained but not be combat ready due to these other factors. ARTEP is not designed to incorporate these other factors; rather it is

intended to guide training and to provide feedback to the units as to how near or far they are from being able to perform fundamental combat missions. This implies that the necessary time to correct deficiencies will be made available following evaluation.

How this issue of the use of ARTEP is resolved will affect other issues, such as, for example, whether to adjust standards for under-strength units. To determine training readiness the standards should be adjusted to the size of the force; to determine unit combat readiness, however, the standards should remain fixed.

Subobjective 2.1 To examine the degree to which ARTEP permits valid assessments of unit proficiency.

a. Do unit commanders agree with the overall evaluation given their units as a result of the ARTEP?

b. Do division staff and commanders, based on their knowledge of units, agree with the ARTEP evaluation received by units?

c. How accurately do ARTEP mission standards reflect a unit's ability to perform its mission?

d. Were there any perceived differences in the validity of the evaluations resulting from the sequential vs. concurrent testing schedules?

Discussion

This subobjective attempted to estimate the validity of the missions and standards prescribed by the ARTEPs. Validity as examined herein refers to the accuracy and legitimacy of the missions, standards, and conditions as stated in the ARTEP and does not include how well they were evaluated. The latter is a question of reliability which is addressed in the next subobjective.

Estimates of validity are difficult to attain in objective terms. The ultimate criterion of validity would be the correspondence of the missions, standards, and conditions to actual combat situations. Short of that, the best available estimate seems to be in the opinions of military observers as to the correspondence between the two. Such expertise was, of course, the basis for the original definition of ARTEP T&E outlines. This effort, indeed the whole purpose of the tryout to a large extent, was to verify the validity of those statements. Since it was a major focus of the units that were testing the ARTEP,

much of their after action report focused on this issue. Considerable portions of the discussion presented on this topic are based on these reports from the units and observers as well as on data collected by the validation team.

The battalion and company commanders indicated that they felt that the ARTEP evaluation was more thorough and provided a better estimate of their unit's proficiency than former ATTs. They tended also to agree with the evaluation they received in most respects. The positive aspects of the ARTEP evaluation that they pointed out were its mission relevance, the inclusion of live firing, and mission accomplishment based evaluation rather than checklists. Some respondents indicated, however, that they felt the absence of checklists and the resultant reliance on evaluator judgment was a weakness in the ARTEP and preferred checklists for training and evaluation. Differences of opinion with the evaluation they received were primarily based on the perceived qualification of the evaluators and the inflexibility in applying standards to understrength units.

The problems identified with respect to the validity of the ARTEP dealt mainly with the statements of the conditions and standards. While some recommendations were made to revise mission statements, they were generally acceptable. Specific mission recommendations made were, for example, to add more missions to the Scout platoon, to revise the mortar platoon missions, and to clarify the task platoon meeting engagement. The recommendations for revisions to the standards are intended to improve both their validity and specificity. The most

extensive revision to standards appears necessary in the tank gunnery area where there are major differences between ARTEP and TCQC standards. Decisions must be made as to whether the standards for the two should be complementary, identical, or independent of each other. Numerous other specific recommendations concerning specific ARTEP standards are detailed in Section 4.0.

Changes are also recommended in ARTEP evaluation procedures that impact on ease of test administration. These changes are primarily aimed at providing more flexibility in scheduling and programming ARTEP missions and events.

Other recommended administrative changes impact on test validity. It was found that aggressor action is still less than adequate in ARTEP as applied at Ft. Lewis. Sufficient emphasis and guidance has apparently not been provided by the ARTEP in this area. The actions of the aggressors do not sufficiently define the situation so that the friendly forces can make realistic responses. The definition of the situation is heavily dependent on controller interpretation which was not always reliable. Additional administrative factors affecting validity that are addressed in the change recommendations are provision of adequate zeroing ammunition, handling understrength units, and the testing schedule to be followed.

The 9th ID opinions on sequential vs. concurrent testing in ARTEP favored the sequential mode wherein sub-units are tested prior to the battalion FTX phase. There were cogent arguments presented on both sides of the question however. Sequential testing was considered

easier to handle and schedule administratively. It requires fewer overall evaluation personnel and does not require withdrawing units from and inserting them into other actions. Its proponents held that the sequential mode was also more valid since the fatigue factor for personnel undergoing sub-unit testing was constant (equally rested) and all units were full strength for the battalion level exercises. Proponents of the concurrent test schedule wherein sub-units are pulled out and tested separately during battalion operations felt that the fatigue and unit insertion and withdrawal increased validity since it reflected the actual combat situation. (In the 9th ID, it turned out that the company with the most fatiguing schedule performed best.) It also tended to force the commander to utilize his staff since he couldn't be everywhere at once, whereas he could run the whole operation under the sequential mode.

Another factor which reduced the validity of the ARTEP evaluation in the 9th Division was the fact that some of the evaluators did not possess the requisite qualifications for their assignments. This occurred because the 9th Div had to augment their evaluation staff with personnel from other units on a TDY basis. Some of these personnel were not selected in strict accordance with the requirements of ARTEP, so that occasionally an Air Defense officer ended up evaluating an infantry exercise or some other equally invalid combination occurred. In at least one case the qualifications stated in ARTEP were found to be inappropriate. An infantry second lieutenant was specified for

the squad SCOPES exercise whereas an experienced E-7 is considered more appropriate. It was also the opinion of many of the validation staff that the rank of the evaluator should always exceed that of the unit commander being evaluated. These adjustments would increase the overall validity of the ARTEP evaluations.

Subobjective 2.2 To determine the reliability with which ARTEP evaluation standards are applied.

- a. Were the judgments of evaluation personnel in agreement with those of independent judges?
- b. Were the evaluation procedures established by the test administrator in concert with ARTEP intent?
- c. How were test evaluator personnel trained?
- d. Were performance evaluations given a unit on ARTEP tasks related to the overall evaluation received on mission objectives?
- e. What is the relationship between sub-unit mission accomplishment and parent unit mission accomplishment?

Discussion

The reliability of the ARTEP evaluation refers to how consistently the standards can be applied by different evaluators, and by the same evaluator from one administration to the next. The latter could only be determined if multiple administrations could be compared or if sufficient control were possible to perform a split-half comparison. Neither of these were possible in this validation.

Several indicators of evaluator reliability were examined. Since evaluator training is a major factor in achieving evaluator reliability the training given them was closely examined. In the case of the 9th ID, the evaluator training was found to be inadequate. This was primarily due to the PEG's not having sufficient time to prepare the training. Its weaknesses were that it did not adequately explain the ARTEP concept and philosophy, especially considering the diverse

backgrounds of the evaluators; provided no training on the latest armor and infantry tactics that would insure some minimum common framework for all the evaluators; and did not deal sufficiently with the practical problems of making ARTEP evaluations and how to handle them. As a consequence there were many comments from both the validation personnel and those being evaluated relating to inadequacies in evaluator performance. There was a particular problem in the squad and platoon exercises wherein the evaluators tended to direct and control the events. Evaluators in these situations tended to correct, suggest and direct the units operation so that they would perform correctly. This is a natural tendency that will inevitably occur unless adequately handled in evaluator training.

A second check on the reliability of the ARTEP evaluations was attempted by having validation personnel grade each exercise independently from the evaluator. For this, each validator had a specially prepared T&E outline for the exercise he was observing. It had additional space on it so that he could make his own rating of the unit, record the evaluator's rating, and make any comments that he felt appropriate. While a high degree of agreement between validators and evaluators was found (96% agreement for the Armor Bn evaluation and 90% for the Mech Bn) there were a number of conditions related to the data that reduce the confidence that can be placed in them. First due to logistic constraints it was necessary for the evaluator and validator to share the same vehicle and spend extended periods of time together throughout the exercises. This condition probably reduced the independence of

the ratings considerably even though efforts at independence were consciously made. Further some evaluators did not use T&E outlines in their evaluation, while others did not complete them until some time later. Finally there were some events that the validators indicated were not observed yet completed evaluator forms appeared for them in the final report of the evaluation group.

While there was a mechanism for evaluating each task performance for a given unit mission, there is no place provided in the ARTEP for an overall evaluation nor any guide for so doing. Some evaluators wrote in such an overall performance evaluation and others did not. No relationship between task performance and mission performance was stipulated nor discernable. Guidance relating to sub unit mission performance and overall unit evaluation was provided in the ARTEP and was further specified in the FORSCOM Letter of Instruction on ARTEP. These were applied as specified.

Overall, then, the available indicators suggest that there were several factors present in the ARTEP and its implementation in the 9th ID that tended to reduce the reliability of the evaluator ratings. The reliability of these ratings could be improved through increased objectivity of the performance criteria, more thorough training of evaluators in test procedures, and by increased guidance in the ARTEP as to task-mission relationships.

Subobjective 2.3 To determine the feasibility of applying the ARTEP evaluation standards.

- a. How well did evaluation personnel understand the T/E standards as presented in ARTEP documentation?
- b. What problems were encountered by the evaluation team in trying to apply ARTEP T/E standards?
- c. Were there any ARTEP T/E standards that were consistently not applied?
- d. Were there any ARTEP T/E outlines or standards added by the evaluation group?
- e. Could the evaluation personnel properly position themselves during the evaluations to receive the inputs (visual & aural) required to make the evaluation?

Discussion

Based on the evaluator training as previously discussed there was a difference of opinion between evaluators and validation personnel as to how well the evaluators understood the ARTEP standards. The evaluators felt confident that they understood them while the validators felt that they (the evaluators) did not. Problems in applying the standards were generally attributed to lack of evaluator training rather than in the statements of the standards themselves. There were, however, many problems cited throughout the validation data and the unit after action reports that indicated considerable concern about the feasibility of applying the ARTEP standards. While ostensibly stated in specific performance terms, they contain many indefinite

terms such as "on time," "excessive," "sufficient," "reasonable," "promptly," "proper," etc. Interpretation of such terms is bound to vary widely without some standardized guidance. Many personnel, both those being evaluated and those conducting the evaluation, were seriously bothered by the discrepancy between the concept of objective mission performance evaluation and the reality of it as represented by the ARTEP standards. There is a critical need for all of the standards to be more strictly defined if the evaluations are to be reasonably comparable.

A problem that has always plagued large scale performance evaluations is that of the positioning of evaluation personnel. In many instances evaluators stayed with the unit leader. This is frequently not the best position from which to make observations. This problem is related to the number of validation personnel available in that the optimum solution is to use multiple observers at various vantage points to observe events as they progress. While it may not be possible to increase the number of observers, the positioning of evaluators should be specifically addressed in both the ARTEP and the training of evaluators.

There is not sufficient definition of the evaluator's role as controller in test administration. Some evaluators took a passive role while others took a quite active one. One area that was generally not well handled was that of casualty assessment. No specific procedures are established for this activity and they are sorely needed. Most often the evaluator would not assess any casualties during an engagement, but make an overall assessment after the action. This did not

permit realistic action and decision on the part of the unit leader. When evaluators attempted to make real time casualty assessments they usually lost contact with the situation and had to abandon their efforts at assessing casualties. Procedures must be established in this area to permit more realistic evaluations.

The 9th Division PEG did produce some supplementary evaluation guides. These were apparently used sporadically by evaluators, some using only T&E outlines, some both, the outlines and the supplementary guides, and some using neither during the actual evaluation events. The vagueness of the standards in the present ARTEP leads to this type of supplementation which will increase the disparity in evaluations between units as well as lead back to checklist type evaluations.

Subobjective 2.4 To determine the degree to which evaluations conducted under ARTEP provide feedback to unit for managing training.

a. Are evaluation personnel able to identify performance deficiencies and causes for meaningful feedback to unit commanders?

b. To what extent did identified deficiencies relate to unit tasks listed in the ARTEP?

c. Were the causes for unacceptable performance fed back to units by evaluators related to those defined in the ARTEP as a basis for judging adequacy of performance?

d. Were ARTEP evaluation results used by units to guide subsequent training efforts?

Discussion

A fundamental premise of the training technology upon which ARTEP is predicated is that establishing training and evaluation on the basis of common objectives will permit an accurate feedback loop from evaluation to training. The presence of this loop is what energizes this training concept and provides an important part of its effectiveness.

After the 9th Division evaluation, a detailed report critiquing each unit's performance in the evaluation was prepared by the PEG. While these critiques, for the most part, made suggestions for further training, they were in varied detail and levels of generality. Responses indicated that some were satisfied with the level and type feedback provided and others were not. There appears to be a need for the ARTEP to better define the feedback cycle, rather than leaving it up to the individual evaluation groups to decide how to accomplish. In this way

it could be better insured that detailed training feedback information is consistently provided as a result of the ARTEP evaluations.

There is, however, a fundamental barrier to the utility of such information. It is the current Army training cycle. It was pointed out by respondents that regardless of what was found in the evaluation their unit would now shift to a non-training status. Consequently there would be no opportunity to capitalize on the information gained from the ARTEP. Further, during the course of their non-training status, turnover would erode the effects of ARTEP training and the relevance of the ARTEP evaluation.

The current deficiencies in the accuracy and validity of the ARTEP can be corrected. If, however, changes are not made in the overall Army training cycle to permit ARTEP to be effective they will be of little advantage. The ARTEP training and evaluation cycle must be redesigned to accommodate the realities of unit requirements and also to take advantage of the significant information on training that results from the evaluation. Otherwise the advantages inherent in ARTEP will be largely dissipated.

Subobjective 2.5 To determine the personnel and material resources required to conduct unit evaluations under ARTEP.

- a. How many evaluation personnel were used and was that number adequate to conduct the ARTEP evaluation?
- b. How long did formal evaluator training take and was that time adequate?
- c. Was the level and type of evaluation personnel used the same as specified in the ARTEP and were they adequate?
- d. How many evaluation personnel were required from outside the Division in order to support ARTEP evaluation?
- e. How much time was required to conduct the evaluation and was it adequate?
- f. Was the type of terrain specified by the ARTEP available for the evaluation?
- g. What were the overall dollar costs required to support the ARTEP evaluation phase?

Discussion

The topic of the cost of the ARTEP is one of overall concern. Certainly in this tryout effort, no expense was spared in the effort to thoroughly test the ARTEP concept. There were initial one-time expenses incurred as well as ones unique to the 9th Division environment (i.e., the need to move personnel and equipment 150 miles to Yakima Firing Center and the requirement to import Armor evaluation personnel from other posts).

The number of evaluator personnel used was that specified by the ARTEPs, 87 for the Mech ARTEP and 91 for Armor. The 9th Division

subsequently recommend that these numbers be increased to 108 and 134 for the Mech ARTEP consecutive and concurrent testing modes respectively, and to 95 and 106 for the Armor consecutive and concurrent modes.

As was pointed out in a previous section, the level and type of the evaluators provided from outside resources did not exactly match ARTEP requirements. The training program weaknesses have also been covered previously. It was generally felt that the time for evaluator training (1 week) was sufficient if the content were revised.

The overall dollar cost reported by the 9th Division for the two ARTEPs was \$247,000. No comparable cost data for previous evaluations was obtained, however, it is understood that FORSCOM is developing a comprehensive set of cost data that will permit fuller evaluation of the cost benefits associated with ARTEP.

Approximately three-quarters of the respondents indicated that the time for the ARTEP was about right while the other quarter felt it was too short. There are some significant advantages to conducting a longer battalion/task force operation. It would exercise the staff and support groups more fully by forcing the commander to use them. Both of these groups felt under utilized and under evaluated in the ARTEP. A longer exercise would permit events to develop in a more realistic time frame and force the individual soldier to adapt to conditions of prolonged commitment. A number of events that are now tested as separate sub-unit tests could be integrated into the overall play of the battalion, increasing realism and continuity. The cost

increase for an extended evaluation should be examined to determine the trade-offs for the advantages that could be gained.

2.2.3. Objective 3 To determine the effect of the FORSCOM Letter of Instruction on the training and evaluation conducted under ARTEP.

Summary

As was stated earlier, the 9th Division received its FORSCOM readiness evaluation based upon the performance of the two battalions being tested in the ARTEP tryout. FORSCOM therefore issued a Letter of Instruction that established a more stringent set of achievement standards, based on the ARTEP missions, than originally defined in ARTEP.

There was a general consensus among ARTEP participants that the combining of the two requirements degraded the ARTEP evaluation in two respects. The increased pressure to "pass" caused greater control to be exercised and imposed on the structure of training, thus reducing individual commanders freedom, and it decreased the objectivity with which the Division could evaluate its own units. If the standards were too vague, too stringent, or otherwise incorrect they could not be failed or disregarded with impunity.

Beyond the immediate impact of the FORSCOM LOI on the evaluation, there is a directly related larger question to be considered. That is the role of ARTEP in assessing combat readiness. Combat readiness is a complex amalgam of training status, equipment readiness, personnel strength, and equipment strength. The training status component is a very dynamic one. It fluctuates based on turnover, amount and type of training, and availability of resources. To maintain a given state of training readiness requires continuous training at some level. Current training cycles provide for yearly peaks in training readiness,

not for maintenance of training readiness. The ARTEP can provide the criteria for unit performance within any training cycle. Whether the assessment is valid for only an instant or whether it reflects a normal state of readiness depends on the training cycle. It can be used to greatest advantage under a system where evaluator results can be used to redirect and focus training on deficiencies. The type of evaluation needed for this purpose can best be achieved outside of a unit evaluation system that affects the careers of the individuals being evaluated.

The sub-objectives broken out under this objective are not treated separately because there was inadequate data provided in the interview format to support further discussion. Opinions and comments received were either verbal or those presented in the unit after action reports.

SECTION 3.0 1st CAVALRY EVALUATION

3.1 Background

Two battalions of the First Brigade, 1st Cavalry Division, Ft. Hood, Texas, participated in the tryout of ARTEPs 7-45 and 17-35 during the period 23 September - 19 December 1974. A Plans and Evaluation Group (PEG) was formed using the 4th Brigade staff as a nucleus, supplemented by personnel from the Division HQ, III Corps HQ, and Project MASSTER. This group was responsible for planning, organizing and conducting the evaluation phase of the ARTEP evaluation. The 3rd Brigade, 1st Cavalry, was tasked to provide evaluators and equipment support in support of the PEG.

The overall priority given to the evaluation by the 1st Cavalry was equally as high as that given by the 9th Division. The units training under ARTEP were given priority access to ranges, ammo, etc. required in support of their training and the PEG was also provided high priority support.

The decision was made at the outset of the 1st Cav efforts that the units would not receive an official readiness evaluation based on their performance in the ARTEP tryout. This was a major change in conditions from the 9th Division tryout. The overriding concern of the 1st Cav was one of attempting to implement the ARTEPs as written in order to determine as fully as possible the strengths and weaknesses of the documents. As a result little consideration was given to mitigating circumstances, conflicts in the standards or other document

related problems in assessing a unit's performance. Right or wrong the standards were applied. Subsequently then, the inadequacies and inequities discovered in this process were documented and changes recommended. Such an approach was possible because the units were not receiving an official readiness evaluation.

While the standards were applied as written insofar as possible, several modifications to the condition and structure of the test were made prior to the evaluation. These modifications were made both on the basis of local constraints and on judgments of the PEG that certain modifications would enhance the realism for which ARTEP is striving. The primary modifications were to commence missions from the ending locale of the previous mission rather than displacing to an assembly area between missions, to integrate certain sub-evaluations into the battalion FTX, to increase the realism of targets and firing positions, and to increase aggressor forces and add tactical air to the exercises. These modifications are not considered to have had any negative impact on the validity of the evaluation results. Two of the modifications, inclusion of some sub-unit evaluations in battalion FTX and use of TANKS (Tactical Application of Numerical Kill System) provided insight into the feasibility of recommendations from the previous ARTEP tryout.

The data collection effort in connection with the CATB validation of the 1st Cav ARTEP evaluation was modified on the basis of the experience gained in the 9th Division evaluation. Validators were assigned to accompany a sample of the evaluators and it was still necessary for

them to share transportation and operate very closely as was the case in the 9th Div. Modified T&E forms, which were designed for CATB use in their validation efforts, and provided space for evaluator comments, were adapted by the PEG for evaluator use. These forms facilitated data recording and evaluation by the evaluators.

The validation interview forms used in the 9th ID tryout were modified so that they could be administered as questionnaires. The experience gained in the previous tryout indicated that with some modification, the validation questions were sufficiently clear to permit the use of the questionnaire format. This improved data collection efficiency and increased the overall data yield. The questionnaires were left with the Brigade with instructions as to who was to complete them. Following the evaluation phase, the completed questionnaires were collected, reviewed for completeness, and used, along with the unit after action reports and other observer comments, as the basis for this analysis. It was originally intended that follow up interviews would be conducted with personnel who did not receive questionnaires or whose questionnaires were not complete. Due to unforeseen travel restrictions this portion of the effort was not conducted.

3.2 Results

Results from the 1st Cav questionnaires were more complete than from the 9th Division. Sixty-four questionnaires were distributed and fifty-four were completed and returned. The number of total possible respondents for any particular question varied widely since questions were selectively addressed to respondents based on their position and role in the evaluation. All respondents, however, were thorough in their treatment of the questions.

The discussion of the results of the 1st Cav tryout is based on the questionnaire responses, the material contained in the various after action reports of the units, and memos filed by other observers, and concentrates primarily on those portions of the 1st Cav data that add to what was found in the 9th Division. Additionally it identifies areas of specific agreement or contradiction between the two tryouts. Major issues already adequately treated in Section 3.0 are not repeated in this Section.

3.2.1 Objective 1. To assess the effectiveness of the ARTEP as a guide in planning and conducting unit training.

Summary

The 1st Cav units had approximately 8 weeks available for ARTEP training. The initial several weeks, however, were devoted to planning and organizing training rather than conducting it. The actual troop training period averaged in the 4-5 week range.

The primary difficulty encountered by the 1st Brigade staff in planning training was not with the ARTEP itself so much as with its use in conjunction with other training management literature. The efforts to define training needs as prescribed by TC-21-5-1 & 2 were not successful in that they encountered conflicting terms and incomplete treatment of the problems. Consequently it was necessary for them to rely on the programs and techniques that they were familiar with from past experience.

There was extensive reliance on past training guidance such as ATT's and from Subject Schedules to guide training efforts. Training was perceived as being largely the same except more time and resources were available; therefore better results were obtained. The ARTEP missions did apparently drive more squad and platoon level training and this was well received by the lower echelons. The overall response, however, was to centralize control of training even more than before ARTEP and attempt to accomplish the typical yearly training cycle in the space of a few weeks. While ARTEP helped focus training, and the high priority of the tryout mission made resources available, the training techniques and approaches apparently changed very little. This

differed greatly from the perceptions of the 9th Division (Mech Battalion) personnel who felt this training differed extensively from previous training. One part of the difference may have been a greater reliance on past training guidance in the 1st Cav and more concern with training for the specific ARTEP missions by the 9th Division.

Subobjective 1.1 To determine if commanders were able to develop training programs to achieve the stated ARTEP objectives.

- a. Was the ARTEP used as the basis for developing training schedules at each command level?
- b. Were the battalion and subordinate element missions/tasks adequately specified in the ARETP?
- c. Were the conditions under which unit elements must perform adequately specified in the ARTEP?
- d. Were the standards of performance for unit elements adequately specified in the ARTEP?
- e. Were training priorities established based on commander estimates of current proficiency on the missions/tasks included in the ARTEP?
- f. Were priority unit mission/tasks established by higher command levels and if so were they adequately communicated?
- g. What local training management documents i.e., training circulars, training schedules, training notes, etc. - are required to support ARTEP training management within the division?
- h. Was the responsibility for scheduling and conducting the required training delegated to the lowest possible command level?
- i. Did units train differently under ARTEP than previously?
Is so, was the training more effective?

Discussion

The ARTEP was used as a primary source of information in developing training according to 12 respondents and was indicated as being one of

several items used by the other 5 respondents. Army Subject Schedules, ATTs, and ATP's were also listed as references used. A need was expressed for the "how to" training literature that is anticipated in the near future and a suggestion was made that the T&E outlines should contain training references for specific tasks.

The ARTEP materials were generally considered clear and understandable. Comments on specific portions that were not clear dealt with conditions and standards rather than mission statements. For example, it was indicated that the standards for the HQ & HQ Co elements referred back to Appendix D (Level II) for details which tended to reduce the perceived importance. No problems of clarity were raised, however, which affected the ability of the units to train under ARTEP.

An effort was made by the 1st Brigade to analyze the training requirements contained in ARTEP by following the guidance contained in TC's 21-5-1 and 2. A committee was established to accomplish this and provide guidance to the battalion. This effort was, by the brigade's estimate, not successful due to the incompleteness of the guidance documents and a lack of agreement with the ARTEP as to terminology. A great deal of effort was therefore spent without significant return. It is important that these inconsistencies be eliminated if unit personnel are to continue to be expected to utilize the training management documents. Consideration should also be given to the types

of analysis that can and should be conducted in the field. Certainly commanders need to match their unit's capabilities with the prescribed ones. However, it is probably not appropriate for each commander to have to analyze the ARTEP tasks to derive the skill and knowledge requirements embedded in each mission. This is one area in which the 1st Brigade people expended a great deal of effort. When the ARTEP mission, conditions, and standards are validated and finalized, supplementary materials should be produced that provide training guidance, skill and knowledge requirements, and intermediate training objectives. The commander will ultimately have to make his own assessments, but such guidance would make decentralization a more viable concept than it is at present.

Training was generally organized and planned at the Battalion level, operating in close conjunction with the Brigade, in the 1st Cav tryout. It was indicated by some Company-level personnel that there had been more autonomy of training prior to the ARTEP tryout. This reflects the probable higher attention given the units due to the importance of the tryout. Under more normal conditions such special attention would be less possible or probable.

The available training literature was used extensively in conducting ARTEP training. Copies of the T&E outlines for example, were given out down to the squad level in the Mech Bn, and the available new training pamphlets produced by CATB were used by the NCO's. Locally produced guidance consisted of training schedules, LOI's, and administrative

guidance. One mech company commander commented in the questionnaire that he needed the tank Bn ARTEP when he was attached to the Tank Bn for missions.

In terms of how much ARTEP training differed from previous training, most respondents indicated that they felt it was essentially the same as previous training. The important differences identified were stated as being more a matter of form than substance, such as more oriented to mission accomplishment than to procedures and in the distribution of available assets. A factor noted in keeping training in the same mold as before was the constant input of new personnel requiring repetition of crew and squad level training. While the training was not perceived as greatly different, it was perceived as being more effective than previous training. This was attributed to the greater emphasis on squad and crew level training, performance based evaluation, increased support, and increased motivation of the individual soldier due to his increased involvement. The detriments to ARTEP training that were noted were that level 1 training was undertaken before units were at levels 2 or 3 and a lack of individual marksmanship instruction.

Subobjective 1.2 To determine the degree to which the ARTEP enables unit commanders to identify required training resources.

- a. What references, training literature were requested as a result of ARTEP?
- b. What references, training literature did the units receive?
- c. How were references and other training literature such as FM 21-6, TC 21-5.1 and TC 21-5.2, used during the conduct of ARTEP training?
- d. What support in the way of equipment was requested to conduct ARTEP training?
- e. What type terrain was requested and for what period of time?
- f. How much training time did unit request to prepare for ARTEP evaluation?
- g. How were equipment, terrain, and training time requirements determined?

Discussion

As has been discussed in other contexts the reference materials that are available were extensively used by the 1st Cav. A need was expressed for both better referencing to appropriate material in the ARTEP and for more literature on actual weapons and tactics. Such material as was available was used in all phases of training from planning to evaluation of results.

The ARTEP was not helpful in terms of identifying equipment required for training, especially training aids. These had to be determined based on the training designed to meet the ARTEP objectives. While

this is probably appropriate for TO&E equipment, a description of suggested training aids and their role in ARTEP training should be included or available as an ARTEP reference.

Respondents indicated that time and terrain requirements could be adequately estimated from the ARTEP, however, they were ultimately dictated by what was available, as was the case with the 9th Division. While this can be accepted for terrain, there eventually will have to be a better basis for time planning than simply using all that is available. This should be done by validating the time estimates postulated in the ARTEP levels concept. A unit should be given an ARTEP at a defined level and then retested at the end of the specified interim to determine their progress. Based on the information available from the ARTEP tryouts to date, only general estimates of time requirements are available and these are all predicated on training to the C1 level. At present, therefore, the ARTEP not only doesn't but can't provide meaningful guidance on time required for training.

Subobjective 1.3 To determine the degree to which the ARTEP leads unit commanders to employ performance oriented training techniques.

- a. Were the objectives of training adequately communicated to all unit elements undergoing training?
- b. Were performance oriented training objectives established for the battalion and subordinate elements?
- c. To what extent did unit elements practice the objectives established for training?
- d. What training techniques other than the practice of objectives were employed?
- e. Were standards of performance set for unit elements and used as basis for progression through training?

Discussion

The opinions on the adequacy of the ARTEP missions statements as training objectives for directing training were fairly well divided. The majority of respondents saw them as only somewhat useful as opposed to very useful. Two respondents indicated that they were not useful. The problems indicated were that the mission statements were too general for less experienced personnel. Half of the respondents indicated that additional training objectives were developed for the platoon and company levels.

While the most frequently noted training technique employed was "practicing ARTEP missions," individual and group instruction were also frequently employed. It was commented that the ARTEP missions did not

differ from the traditional, implying that therefore training need not differ either. Other than increasing the small unit training, which was viewed as very desirable, the ARTEP did not appear to promote the use of any new approaches to unit training.

Of 12 respondents, 5 indicated that training progression was based on achievement of objectives with the balance citing schedules and estimates of achievement as the basis for progression from one phase of training to the next. Several factors were cited as preventing a more logical training progression. These were the fact that brigade and battalion training were imposed for extended periods using up time that smaller units felt they needed and the need to continuously train filler personnel. It was indicated that CPX type exercises rather than FTX's could have served brigade and battalion training needs and made time available for more effective training of individual units.

Subobjective 1.4 To determine the personnel and resources required to support training under ARTEP.

a. Were the requirements for ranges and maneuver areas increased or decreased in training under ARTEP?

b. Were ammunition requirements increased or decreased in training under ARTEP?

c. Were requirements for equipment, vehicles and POL increased or decreased under ARTEP?

d. Were requirements for classroom facilities increased or decreased under ARTEP?

e. Were requirement for training devices increased or decreased under ARTEP?

f. How much time was available for units to do ARTEP training?

g. What steps were taken at each command level to insure that the maximum amount of time, resources, and personnel were made available for training?

Discussion

The 1st Cav experienced general increases in the requirements for ranges, maneuver areas, and ammunition as a result of greater emphasis on field training in training under ARTEP. These resources were made available by giving the 1st Brigade units priority over all other post tenants and scraping up ammo "by hook or crook." While there are world wide shortages in some types of ammo, the problem was increased by inadequate forecasting since ARTEP requirements were not reflected. Improved forecasting would reduce these problems somewhat.

Several specific items that were increased in demand were CBR monitoring equipment, concertina wire, practice mines and claymores, machine gun blank adapters, sandbags, wire, batteries (radio and night vision devices), and tape for marking tank numbers. The new training device requirements were for tank simulators, target tanks, and aggressor uniforms. The number of devices was sufficient for two battalions, but it was estimated that there would not be enough available if more battalions were training under ARTEP. The time available for 1st Cav units to prepare for ARTEP averaged approximately 4-5 weeks.

Training time available during the ARTEP training period was maximized by eliminating post details for the tryout battalions, curtailing leaves and passes, extending the training day, moving units to the field, and implementing the Division cyclic training programs. In addition maintenance priorities were increased and Division resources were available on a first call basis. Given these exceptional conditions the time available for training was generally regarded as too short. Only one unit, the CSC of the 2/5 Cav judged the time adequate because they were already well trained and needed only to adapt to ARTEP standards. Other estimates of time required ranged from 8 weeks (without personnel turbulence) to 1 year given normal conflicting requirements. As pointed out in previous sections, there is no information on which to base the accuracy of these estimates. The Hq Co commander indicated that he could make no estimate of the training time required due to lack of specific feedback on his unit's performance in the ARTEP evaluation phase. The estimates of time required were received from commanders

down to the company level. Opinions as to time available and required for training from platoon and squad leaders were planned to be collected by interview, but had to be curtailed due to fund limitations.

Subobjective 1.5 To determine the adequacy of ARTEP as a guide for conducting multilevel and combined arms training

a. Were subordinate elements of the battalion trained concurrently, i.e., on a multilevel basis?

b. How was the training of the battalion and subordinate elements sequenced?

c. Were combined arms attachments made in conducting ARTEP training?

d. Was the time for training sufficient after cross-attachments occurred?

Discussion

Most of the units of the 1st Cav followed some form of concurrent, multilevel training, in which squad and platoon levels was conducted concurrently followed by company and battalion level concurrent training. This was done in response to the time pressures felt to be existing in training. Four unit commanders indicated that they followed a sequential training plan in which squad, platoon, company, and battalion level training were accomplished in turn. This was the most desired program according to the respondents, but was not generally possible. It is, of course, the conventional and most familiar type of program. It is also the most time consuming.

The respondents in the 1st Cav felt that there was sufficient time available for cross attached training for combined arms operations. While the opinion was expressed that tank/infantry training must be habitual, it was felt that Air Defense, Artillery, & Engineer support

should be retained at battalion level until needed by companies, otherwise they are a hinderance to the company. The time estimates as to when cross attachments should be made for training ranged from 2 weeks to 2 months, with the general statement being made that tanks should never be employed alone.

Several comments on the ARTEPs were made which further support the notion of having one combined ARTEP rather than separate ones for Armor and Mech Infantry. The discrepancy between the two ARTEPs in terms of the comprehensiveness of planning information was noted and a suggestion made that both include the guidance now only found in 7-45 on evaluation and support requirements. As was previously pointed out, a Mech commander noted that he needed the Armor Bn ARTEP when operating on an attached basis. Another comment was that 17-35 should contain appropriate appendices from 7-45 so that the crews/squads, platoons and company of the attached Mech unit could be evaluated during the Armor ARTEP. One document would permit all of the above, as well as the converse situation for attached Armor in the Mech ARTEP. This situation was highlighted more in the 1st Cav evaluation than in the 9th Div evaluation. In the 9th Div the cross attached units were from a battalion that was also undergoing ARTEP evaluation, so that they were subsequently evaluated. In the 1st Cav the attached units were from battalions that were not undergoing ARTEP evaluations. Therefore the attached units did not receive an evaluation other than in their attached role.

3.2.2 Objective 2. To assess the effectiveness of the ARTEP as an instrument for evaluating unit proficiency.

Summary

The evaluation conducted at Fort Hood using elements of the 1st Cav Division was able to build on and overcome some of the problems experienced by the 9th Division. This was possible because of the information exchange program existing between the two units for the purpose of examining problems on a mutual basis. The 1st Cav was not constrained in their operation in two important ways that affected the 9th Division. They did not have to ship units to a remote test site and there were other armor units on post to provide personnel and logistic support. This was presumed to represent the more typical circumstances in which the ARTEP would be used. Another major difference in circumstances, already mentioned, was that the 1st Cav units were not to receive an official readiness rating based on the results of the ARTEP evaluation. The 1st Cav also conducted a pilot test of the ARTEP evaluation several weeks in advance of the actual evaluation. The purpose of this test was to verify the scenario, timing, evaluation, procedures, etc. To the extent that it employed the units to be tested, operating over the terrain on which they were to be tested, it represented a compromise of the actual test. This would have to have been seriously considered if the results of the test were to be used for an official rating of the units involved. Since it was strictly a test of the ARTEP evaluation procedures and standards, the pilot test did not degrade the value of the results obtained. It did represent good training for evaluator personnel,

although at least one evaluator used it as a baseline against which to evaluate the unit's subsequent performance in the actual evaluation.

The overall results of the 1st Cav evaluation phase largely confirmed the findings of the 9th Division. Many standards need revision, the subjectiveness of the judgments requires highly skilled evaluators, objective casualty assessment techniques are needed, aggressor play is inadequate, there is a dearth of support unit evaluation, and more guidance is needed in Appendix H about using ARTEP for evaluation purposes.

New areas receiving more emphasis by the 1st Cav were:

- need for more accurate aggressor force representation
- need for control personnel to conduct fire marking and casualty assessment in support of evaluation
- need for integrated play of close air support
- possibility of testing both sides of opposing forces
- need for increased realism in firing position and ranges to include target tanks
- need for sample test plans in ARTEPs
- need for better diagnostic and feedback information to be generated by the ARTEP evaluation.

Subobjective 2.1. To examine the degree to which ARTEP permits valid assessments of unit proficiency.

a. Do unit commanders agree with the overall evaluation given their units as a result of the ARTEP?

b. Do division staff and commanders, based on their knowledge of units, agree with the ARTEP evaluation received by units?

c. How accurately do ARTEP mission standards reflect a unit's ability to perform its mission?

d. Were there any perceived differences in the validity of the evaluations resulting from the sequential vs. concurrent testing schedules?

Discussion

There was generally high agreement of the unit commanders with the evaluations they received in ARTEP. Of the 18 commanders and training officers from brigade to battalion and company responding, 14 agreed with their evaluation in all or most respects. Three agreed in some respects and disagreed in others, while one disagreed in most respects with his evaluation. The disagreements were couched mainly in terms of questioning the evaluator's judgment or too-rigid interpretation of the standards. One other comment questioned the adequacy of sampling one vehicle crew from each company for cal .50 mg firing. If this was the case, it was indeed an inadequate sample and not in line with the ARTEP.

The unit commanders were almost unanimous in stating that the ARTEP evaluation standards are about right as written for their units, with 12 agreeing, one saying they were too difficult and one saying they

were too easy. Nine of fifteen battalion and company respondents felt ARTEP provides a more accurate picture of unit proficiency than previous ATT's, while five indicated they felt the ARTEP was more accurate in some respects and less so in others. One respondent indicated that ARTEP was less accurate. At division and brigade level, 9 of 12 respondents indicated that they felt the ARTEP a more accurate indicator of unit proficiency.

When asked about the accuracy of the ARTEP as an indicator of a unit's ability to survive and win in combat, respondents were less positive. Of 36 respondents 15 indicated that ARTEP was an accurate indicator while 19 said it was accurate some of the time and 2 said it was not accurate. Their comments indicated that respondents felt that ARTEP was the best measure yet developed but that there are numerous intervening factors that must be considered. Beyond the judgment factor already mentioned there are factors such as personnel turbulence and equipment status that affect combat readiness. The largest area of concern, however, was with the standards. The recommendations for changes dealt extensively with alterations to the standards and improving their precision.

An important area not sufficiently treated in ARTEP in the opinion of 1st Cav personnel was that of Combat Service Support: mess, medics, transportation and maintenance. This is an issue which would have major impact on the ARTEP if it was decided that they should be integrated. At present, the philosophy is that those elements contribute directly toward mission success and their performance will be evident in overall mission performance. The counter argument, however, is that the FTX portion is not of sufficient length for these factors to come into play

realistically; therefore, mission accomplishment is not affected by them in the test context. Therefore either the test should be lengthened so that they do affect outcomes and are measured thereby, or specific evaluation should be made of them by having evaluators assigned and the scenario modified to energize those system elements.

To the extent that ARTEP eliminated evaluation of trivial and irrelevant details and focused on mission accomplishment then, there was high approval. The counter, however, was the general suspicion of the reliance on subjective evaluations. ARTEP is considered more accurate in focusing on mission accomplishment and less accurate in its dependence on subjective judgments. In sum there was high agreement with the validity of the missions and the criterion of mission accomplishment; there was less agreement with the primary evaluation technique.

On the question of the relative accuracy of the concurrent and sequential test modes the opinions were slightly in favor of the concurrent mode, which was the other direction from the 9th Div results. Twelve of 38 respondents favored sequential, 19 concurrent, and 7 said they were equally accurate. Concurrent was felt to be more demanding, more expensive, but closer to the pressures of combat. Sequential is easier to plan and control and provides more equitable test conditions for all. In terms of the accuracy of the test as a measure of ability to perform in combat, the concurrent mode is considered more realistic; in terms of the extent to which the tests should be given under standard constraints and conditions to all, the sequential mode is more desirable.

Subobjective 2.2. To determine the reliability with which ARTEP evaluation standards are applied.

- a. Were the judgments of evaluation personnel in agreement with those of independent judges?
- b. Were the evaluation procedures established by the test administrator in concert with ARTEP intent?
- c. How were test evaluator personnel trained?
- d. Were performance evaluations given a unit on ARTEP tasks related to the overall evaluation received on mission objectives?
- e. What is the relationship between sub unit mission accomplishment and parent unit mission accomplishment?

Discussion

The same technique for examining the reliability of the evaluator judgments was employed in the 1st Cav ARTEP evaluation as used with the 9th Division. The same constraints also existed in that, due to logistical considerations, the validator had to ride with the evaluator and otherwise share facilities with him during extended periods in the field. This condition is considered as having a potentially large, though unknown, effect on the independence of the ratings. Thus, while there was 91% agreement between common evaluator and validator ratings in the Mech Bn ARTEP and 95% agreement between the Armor Bn ratings, no definite conclusions about overall reliability can be drawn.

The training given to the evaluators by the 1st Cav contained several elements that were considered by validation personnel to represent a marked improvement over that given in the 9th Division. There

was a greater emphasis and treatment given to the ARTEP concept and philosophy and what it was intended to achieve. Personnel from the Armor and Infantry schools gave presentations on the latest tactical doctrine so that the evaluators were current in that regard. Field work was expanded considerably with the addition of a pilot test previously described.

The qualifications of the evaluation personnel more closely matched ARTEP requirements. This was due to the fact that a larger pool of qualified personnel were available at Ft. Hood than there were at Ft. Lewis.

Because the ARTEP does not prescribe any specific relationship between task performance and overall mission performance the interpretation varied between the 9th ID and 1st Cav tryouts. The evaluators at Ft. Hood tended to apply stricter criteria for mission accomplishment in that in some cases failure on one task caused the mission to be rated unsatisfactory. A wider margin was generally allowed in the 9th Div evaluation. Such variation certainly affects reliability of test results. Further, while ARTEP does provide guidance for the relationship between sub-unit and parent unit performance, the treatment of a unit which misses a significant battalion mission due to concurrent sub-testing is not specified.

Another factor negatively impacting reliability is the degree to which evaluators get involved with the test problem. As was the case at the 9th Div some evaluators in the 1st Cav ARTEP tended to control, direct, correct, and otherwise intervene into the test situation. For test results to be reliable the permissible actions of the evaluator have to be carefully defined and adhered to.

Subobjective 2.3. To determine the feasibility of applying the ARTEP evaluation standards.

a. How well did evaluation personnel understand the T/E standards as presented in ARTEP documentation?

b. What problems were encountered by the evaluation team in trying to apply ARTEP T/E standards?

c. Were there any ARTEP T/E standards that were consistently not applied?

d. Were there any ARTEP T/E outlines or standards added by the evaluation group?

e. Could the evaluation personnel properly position themselves during the evaluations to receive the inputs (visual & aural) required to make the evaluation?

Discussion

The evaluators and PEG personnel indicated that the ARTEP evaluation standards were generally clear and understandable, with 18 of 31 respondents indicating no difficulty understanding them and 13 indicating difficulty with some of the standards. One difficulty reported dealt with the lack of guidance on the relationship between task performance and overall mission performance while others were concerned with vague or indefinite terms or references (i.e. "new tactics," "properly") A major difficulty reported dealt with the grouping of multiple standards into a paragraph and the lack of guidance on the relative value of each component (Do all three elements have to be satisfactory for the task to be satisfactory? 2 of 3? 1 of 3?) Related to this is the fact that the

T&E outlines in ARTEP are not usable as data recording forms. As described earlier, a modified version was adapted that provided space for comments and notations. It is important that any such recording forms be standardized. Otherwise, if each unit designs its own, variation in the standards will result. For example, if the standards presently collapsed into paragraph format are broken out, a checklist appearance results. A checklist may be useful and appropriate, so long as the content is consistent with performance and mission accomplishment assessment. If it opened the door to re-introduction of minute procedural detail, however, it would be very undesirable.

The lack of casualty and damage assessment methods was pointed out as a deterrent to effective judgments about mission success probabilities. One possible solution to this suggested by the Brigade is to augment the evaluator staff with controllers to mark fires and assess casualties. The evaluator would then be free to judge outcomes and have a better basis for so doing.

The evaluators themselves pointed out the lack of guidance on how standards could or could not be adjusted for varying conditions (weather, under-strength units, etc) as making them difficult to apply. Lacking such guidance they assumed the standards to be rigid and they attempted to so apply them. Guidance for dealing with varying conditions should be added both to the ARTEP standards and to the evaluator training.

There were several evaluation standards listed as not being applied: the HEP engagements for tank crew (described as technically impossible), techniques of fire for M113/M114 crews; scheduled maintenance;

CBR; and requisitioning procedures. No specific comments were made regarding any difficulties of the evaluators to properly position themselves during evaluation. The overall opinion of the PEG, however, was that the evaluators were overtaxed and should be augmented by controller personnel.

Subobjective 2.4. To determine the degree to which evaluations conducted under ARTEP provide feedback to unit for managing training.

a. Are evaluation personnel able to identify performance deficiencies and causes for meaningful feedback to unit commanders?

b. To what extent did identified deficiencies relate to unit tasks listed in the ARTEP?

c. Were the causes for unacceptable performance fed back to units by evaluators related to those defined in the ARTEP as a basis for judging adequacy of performance?

d. Were AREP evaluation results used by units to guide subsequent training efforts?

Discussion

The opinions of the 1st Cav personnel on the value of the information about performance deficiencies feedback from the evaluation varied considerably. Eight of eleven questionnaire respondents indicated that the information was very useful, that it helped identify weak areas, and the comments of the evaluator were very comprehensive. Three respondents indicated that the information was somewhat useful, and one said none was provided. The shortcoming noted in the feedback information was that it was not specific enough or was too subjective. An extreme opinion was represented by the statement that the opinions of the evaluator are useless. Another comment indicated that the caliber of the information feedback varied with the evaluator; this is probably the prime factor in explaining the variation in opinions.

The after action report of the 1st Brigade dealt extensively with the overall problem related to feedback from the ARTEP. The brigade commander expressed the opinion that the performance based evaluation of mission accomplishment is inherently void of diagnostic type information. Other unit personnel, however, indicated that the feedback they received was very useful for training purposes. It is correct that the ARTEP, at present, contains no formal mechanism for specific diagnostic feedback other than the comments of the individual evaluators which will, of course, be of highly varied quality. This, together with the out-of-phase training cycle previously discussed, can reduce the ultimate training value of the ARTEP evaluation phase. If a commander were able to better observe the performance of his unit and use his key cadre to assist him, then the feedback would be more direct. If he is involved in the test performance however, and reliant upon test results for feedback on performance deficiencies, a more detailed and comprehensive system is necessary.

Following ARTEP the same conditions applied for the 1st Cav as did for the 9th Div; it had to turn from training to other missions. Consequently there was no opportunity for them to apply the information and experience gained from the ARTEP evaluations to correct identified training deficiencies.

Subobjective 2.5. To determine the personnel and material resources required to conduct unit evaluations under ARTEP.

a. How many evaluation personnel were used and was that number adequate to conduct the ARTEP evaluation?

b. How long did formal evaluator training take and was that time adequate?

c. Was the level and type of evaluation personnel used the same as specified in the ARTEP and were they adequate?

d. How many evaluation personnel were required from outside of the Division?

e. What type of equipment was required from outside the Division in order to support ARTEP evaluation?

f. How much time was required to conduct the evaluation and was it adequate?

g. Was the type of terrain specified by the ARTEP available for the evaluation?

h. What were the overall dollar costs required to support the ARTEP evaluation phase?

Discussion

The 1st Cav broke out the number of evaluators from other support personnel when responding to the question of how many evaluation personnel were required for the ARTEP evaluation. They indicated that 36 evaluators were used for ARTEP 7-45 and 49 for 17-35. The total number of support personnel required was 176 when the drivers, medics, range personnel, etc. are included. This does not include the aggressor

forces (1/9 Cavalry Squadron). The number of evaluator personnel was considered adequate, but more support personnel were considered necessary to permit adequate fire marking, casualty assessment, and test control. Such increases were recommended in order to increase the realism of the overall test situations. The evaluator personnel used were in the quantities recommended by the ARTEP, however, in some instances they were of less rank than specified due to personnel shortages. The 1st Cav Division required seven personnel (1 Col, 1 Lt Col, 3 Maj & 2 Capt) from outside the division to complete the evaluator staffing. No major problems were encountered from this, only some minor interferences that resulted from these personnel occasionally being called away on parent unit business. More difficulty was encountered in getting equipment support effected from one brigade to another. Numerous outside sources had to be used to assemble the necessary equipment to support the ARTEP. Major items required from outside Division were SCOPES equipment, MTS for REDEYE, aggressor equipment, searchlights, UH-1H, high performance aircraft, and target tanks.

Evaluator training, while considerably improved over that given in the first tryout at Ft Lewis, still requires revision. The time period of one week is considered appropriate but the focus of the content needs to be sharpened. Evaluators still did not feel an adequate grasp of the ARTEP until after the initial test exercises. They commented that more information was needed on the operational impact of ARTEP on their job as evaluators. This would be related to the earlier identified need for information on their role in monitoring but not interfering in the

test results. While instruction in tactics was provided by instructors from the Infantry and Armor schools, more information was identified as needed on "traveling overwatch" and "new tactics." Other comments were made for more practical field work and instruction tailored more strictly to the evaluator and his specific job.

With respect to terrain adequacy for the ARTEP evaluation, 8 of 9 respondents indicated that the proper type was available and utilized at Ft. Hood while one respondent felt it was not large enough. On the question of time devoted to the ARTEP evaluation 6 of the 9 respondents indicated that the time used (that specified in the ARTEP) was about right. Three felt the time too short and none indicated it was too long. The reasons given for the time being too short were that it permitted one man, the commander, to run the whole operation without utilizing his staff and did not permit adequate evaluation of support units to sustain operations.

Specific cost data on the 1st Cav ARTEP evaluation was not provided. It was generally felt, however, that the costs would be reduced with experience to improve planning, scheduling, and utilization of support. Other suggestions for reducing costs included testing two battalions simultaneously using the opposing forces concept, use of the consecutive testing mode, and simplifying the platoon tests.

3.2.3 Objective 3. To determine the effect of the FORSCOM Letter of Instruction on the training and evaluation conducted under ARTEP.

Summary

The FORSCOM LOI had no impact on the 1st Cav training and testing under ARTEP since they were not to receive an official readiness rating from it. Their efforts were directed at following the ARTEP guidance just as it was stated in order to fully test the ARTEP concept and documents as they stood.

The 1st Cav Division personnel were aware of the related LOI, however, and had definite opinions as to how it would affect ARTEP training and evaluation. That attitude is best summarized by the comments of Major General Shoemaker, Div CG, in his letter of transmittal of the 1st Cav after action report, to the effect that the urge to view ARTEP results as a quick and easy way to arrive at readiness ratings should be resisted as so using them could obscure their very real training value.

While a number of respondents answered questionnaire items about the LOI, these responses were based on their knowledge of the document from reading it rather than operating under it. Their responses, therefore, are not reviewed in detail since the questions were intended to get responses based on experience with the LOI. Most respondents saw little or no conflicts between the ARTEP and LOI requirements but felt that the two should not be combined, and that ARTEP should be used for diagnosing and correcting training deficiencies. It was generally felt that establishing readiness ratings based on ARTEP results would prevent this.

The questionnaire responses to the questions on ARTEP are included in Annex D, but the reader is cautioned to bear the above circumstances in mind in reviewing them.

SECTION 4.0

RECOMMENDED ARTEP CHANGES

		<u>REFERENCE</u>		<u>SUBJECT</u>	<u>RECOMMENDED CHANGE</u>
<u>ARTEP</u>	<u>7-45</u>	<u>ARTEP</u>	<u>17-35</u>		
<u>Page</u>	<u>Para</u>	<u>Page</u>	<u>Para</u>		
E-3-2	3	E-11-3	Task 2	React to enemy electronic counter measures	Delete from tasks in Annex E. Preparational Annex which provides guidance on role of electronic warfare in training it to the trainer's and evaluator's discretion as to when and in which missions units subjected to enemy EW measures. Pick up use by the aggressor as one of the general conditions for all missions. Suggest that and recording teams be colocated to simulate aggressor capabilities.
E-4-3	1	E-16-2	Task 3		
E-9-3	1				
E-10-2	Task 4				
E-23-2	Task 3				
4-1	E-1-3	Task 1	E-5-2	Task 6	Delete from tasks in Annex E. Preparational Annex which provides guidance on role of CBR warfare in training. Leave it to the trainer's and evaluator's discretion as to when and in which missions units will be subjected to enemy CBR attack. Pick up CBR environment as one of the general conditions for all missions.
	E-5-2	Task 3			
	E-7-3	Task 3			
	E-11-2	Task 2			
	E-4-2	5	E-5-3	Task 3	Delete from tasks in Annex E. Preparational Annex which provides guidance on defense against air attacks. Leave it to the trainer's and evaluator's discretion as to when and in which missions units will be subjected to enemy air attacks. Pick up the possibility of being subjected to enemy air attack as one of the general conditions for all missions.
	E-5-3	Task 2			
	E-10-2	Task 3			
	E-11-3	Task 2			
General Added		General Added		Evaluators, Fire Markers	Additional personnel in the form of fire markers are needed--one per company team.

SECTION 4.0

RECOMMENDED ARTEP CHANGES

RECOMMENDED CHANGE

JUSTIFICATION

tronic Delete from tasks in Annex E. Prepare an additional Annex which provides guidance on the role of electronic warfare in training. Leave it to the trainer's and evaluator's discretion as to when and in which missions units will be subjected to enemy EW measures. Pick up EW use by the aggressor as one of the general conditions for all missions. Suggest that jamming and recording teams be colocated to simulate aggressor capabilities.

Delete from tasks in Annex E. Prepare an additional Annex which provides guidance on the role of CBR warfare in training. Leave it to trainer's and evaluator's discretion as to when and in which missions units will be subjected to enemy CBR attack. Pick up CBR environment as one of the general conditions for all missions.

Delete from tasks in Annex E. Prepare an additional Annex which provides guidance on the defense against air attacks. Leave it to the trainer's and evaluator's discretion as to when and in which missions units will be subjected to enemy air attacks. Pick up the possibility of being subjected to enemy air attack as one of the general conditions for all missions.

kers Additional personnel in the form of fire markers are needed--one per company team.

As currently written, units being evaluated know in advance when enemy EW will be played and plan around it for specific missions only. 1st Cav Div AAR.

As currently written, units being evaluated know in advance when CBR warfare will be played and disregard it at all other times.

As currently written, units being evaluated know in advance when they will be subjected to enemy air attack and disregard it at all other times.

1st Cav Div AAR

REFERENCE		REFERENCE		SUBJECT	RECOMMENDED CHANGE
ARTEP Page	7-45 Para	ARTEP Page	17-35 Para		
General Added	General	Added	Accident Prevention	An admonition should be placed in all T involving live firing in order to preclude rounds from becoming mixed with blank ammunition.	
General Added	General	Added	T&E Outline Format	Substandards within the T&E standards should be listed individually rather than grouped in a paragraph to facilitate individual ratings by evaluators. This is particularly important in critiques.	
General Added	General	Added	Employment of fighter & recon aircraft & rotary wing aircraft	Emphasis on the employment of fighter and recon aircraft and attack rotary wing aircraft should be included in the ARTEP.	
General Added	General	Added	Combined arms training	A single ARTEP should support cross training of mechanized infantry and tankers and more time should be devoted to combined arms training. T&E's should be expanded to include attached company. 1st Cav Div also recommends including Arty, ADA, and Eng.	
Tab A to Appendices	5	Tab A to Appendices	5	Vehicle/communication equipment suggested for support requirements	Company/team evaluators need the following equipment: 1 carrier, personnel M113; 2 1/4 ton M151; 1 trailer, 1/4 ton; 1 radio, 47; 2 radio AN/VRC 160; 1 radio, AN/PRC 71; 1 binoculars, 7x50mm.
"	2	"	2	Evaluators suggested for support requirements	Company/team evaluators needed are: 1 MAJ: CAPT: Co/Tm Evaluator, 1 LT: Asst Co/Tm Evaluator, 1 LT: Casualty/Damage Assessor, 1 E7/E6: Firemarker
General Added	General	Added	Bn/TF Reserve Co/Tm	T&Es should be developed for evaluating the reserve company/Tm on each of the following missions: delay, area defense, night withdrawal and occupation of an assembly area, illuminated night attack; deliberate daylight attack, and attached company.	

RECOMMENDED CHANGE

JUSTIFICATION

An admonition should be placed in all T&Es involving live firing in order to preclude live rounds from becoming mixed with blank ammunition.

1st Cav Div AAR

Substandards within the T&E standards should be listed individually rather than grouped into a paragraph to facilitate individual ratings by evaluators. This is particularly important for use in critiques.

1st Cav Div AAR

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Emphasis on the employment of fighter and recon aircraft and attack rotary wing aircraft should be included in the ARTEP.

1st Cav Div AAR

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A single ARTEP should support cross training of mechanized infantry and tankers and more time should be devoted to combined arms training. T&E's should be expanded to include attached company. 1st Cav Div also recommends including Arty, ADA, and Eng.

Currently, the mechanized infantry company commander must train under two ARTEPs--one when he operates with his parent battalion and another when he is attached to a tank battalion. 9th ID and 1st Cav Div AAR.

Company/team evaluators need the following equipment: 1 carrier, personnel M113; 2 truck, 1/4 ton M151; 1 trailer, 1/4 ton; 1 radio, AN/VRC 47; 2 radio AN/VRC 160; 1 radio, AN/PRC 77; 1 binoculars, 7x50mm.

9th ID and 1st Cav Div AAR.

Company/team evaluators needed are: 1 MAJ/CAPT: Co/Tm Evaluator, 1 LT: Asst Co/Tm Evaluator, 1 LT: Casualty/Damage Assessor, 1 E7/E6: Firemarker

" " " " " "

T&Es should be developed for evaluating the reserve company/Tm on each of the following missions: delay, area defense, night withdrawal and occupation of an assembly area, illuminated night attack; deliberate daylight attack, and attached company.

" " " " " "

<u>REFERENCE</u>				<u>SUBJECT</u>	<u>RECOMMENDED CHANGE</u>
<u>ARTEP</u> <u>Page</u>	<u>7-45</u> <u>Para</u>	<u>ARTEP</u> <u>Page</u>	<u>17-35</u> <u>Para</u>		
Added	Added	Added	Added	Battalion Combat Trains	T&Es for battalion combat trains should be developed for all major missions. T&Es Hq & Hq company should be changed to pre duplication.
General	Added	General	Added	Random Sampling	Whenever possible, random sampling (sub-element evaluation) should be accomplished as a part of major unit FTX scenario.
General	Added	General	Added	Rear area security breaching of a hasty minefield	Consideration should be given to adding T&Es for these missions at company level.
General	Added	General	Added	Sample evaluation documents for a formal evaluation	There is a need for sample documents to a first time evaluation teams in the prepar of materials, e.g., testing schedule, options scenario, aggressor directive, individual subtest packets, and a test plan i
General	General	General	General	Thrust and realism	T&Es should uniformly emphasize integration all subtests into tactical situations and firing from simulated combat positions.
"	"	"	"	T&E outline format	The T&E outlines should be extended to include a column for evaluator comments in order to provide data for critiques.
"	"	"	"	Post evaluation critique	Guidance and a sample format for conducting post evaluation critiques are needed.
E	Added	N/A	N/A	Large scale dismounted operation	Add an appendix which would present the T&E outline for a company or battalion to breach a fortified position or clear a built up area while dismounted.

RECOMMENDED CHANGE

JUSTIFICATION

ns T&Es for battalion combat trains should be developed for all major missions. T&Es for Hq & Hq company should be changed to prevent duplication.

CATB recommendation.

Whenever possible, random sampling (sub-element evaluation) should be accomplished as a part of major unit FTX scenario.

Realism, economy, 1st Cav Div AAR.

Consideration should be given to adding T&Es for these missions at company level.

1st Cav Div AAR.

1 There is a need for sample documents to assist first time evaluation teams in the preparation of materials, e.g., testing schedule, operations scenario, aggressor directive, individual subtest packets, and a test plan index.

1st Cav Div AAR.

T&Es should uniformly emphasize integrating all subtests into tactical situations and firing from simulated combat positions.

1st Cav Div AAR.

The T&E outlines should be extended to include a column for evaluator comments in order to provide data for critiques.

1st Cav Div AAR.

Guidance and a sample format for conducting post evaluation critiques are needed.

1st Cav Div AAR.

1 Add an appendix which would present the T&E outline for a company or battalion to breach a fortified position or clear a built up area while dismounted.

9th ID AAR.

<u>REFERENCE</u>				<u>SUBJECT</u>	<u>RECOMMENDED CHANGE</u>
<u>ARTEP</u> <u>Page</u>	<u>7-45</u> <u>Para</u>	<u>ARTEP</u> <u>Page</u>	<u>17-35</u> <u>Para</u>		
E-1-1	a.2	E-2-1	a.2	Training and evaluation general conditions, start and end all missions in an assembly area	Unless there is some overriding reason starting and ending most missions in a area, this condition should be deleted
E-2-1	a.2	E-4-1	a.2		
E-5-1	a.2	E-5-1	a.2		
E-6-1	a.2	E-6-1	a.2		
E-7-1	a.2	E-7-1	a.2		
E-8-1	a.2	E-8-1	a.2		
E-11-1	a.2	E-10-1	a.2		
E-12-1	a.2	E-12-1	a.2		
E-1-A-1	3	E-1-A-1	3	Aggressor details	Aggressor action should be realistic as to friendly forces. Artificial portray aggressor such as "each item observed 1 8 on the ground" detracts from realism. sor should be required to mass when nec
E-2-A-1	3	E-2-A-1	3		
E-5-A-1	3	E-3-A-1	3		
E-6-A-1	3	E-4-A-1	3		
E-7-A-1	3	E-5-A-1	3		
E-8-A-1	3	E-6-A-1	3		
E-11-A-1	3	E-7-A-1	3		
E-12-A-1	3	E-8-A-1	3		
E-14-A-1	3	E-9-A-1	3		
4-4 E-17-A-1	3	E-11-A-1	3		
E-18-A-1	3	E-12-A-1	3		
E-19-A-1	3	E-14-A-1	3		
E-20-A-1	3	E-15-A	3		
E-22-A-1	3	E-16-A	3		
E-23-A-1	3				
N/A	N/A	E-2-3	Task 6	Camouflage	Standard which requires that not more than personnel and equipment be detected should amplified. In a barren area such as Yal Firing Center, the percentage appears low. Also guidance is needed as to how much time should be allowed between occupation of position and observation of effectiveness camouflage (e.g., 30 min., 1 hr., 6 hrs.
		E-3-3	Task 1		
		E-5-2	Task 3		
		E-9-2	Task 2		

RECOMMENDED CHANGE

JUSTIFICATION

ion Unless there is some overriding reason for starting and ending most missions in an assembly area, this condition should be deleted.

9th ID exercise planners found this condition unduly restrictive. 9th ID AAR.

Aggressor action should be realistic and apparent to friendly forces. Artificial portrayal of aggressor such as "each item observed represents 8 on the ground" detracts from realism. Aggressor should be required to mass when necessary.

In 9th ID and 1st Cav Div validation, friendly forces often had to react to controller's portrayal of aggressor activity rather than to what was apparent.

Standard which requires that not more than 25% of personnel and equipment be detected should be amplified. In a barren area such as Yakima Firing Center, the percentage appears low. Also guidance is needed as to how much time should be allowed between occupation of the position and observation of effectiveness of camouflage (e.g., 30 min., 1 hr., 6 hrs., etc.).

Clarity and fairness. 9th ID AAR.

REFERENCE				SUBJECT	RECOMMENDED CHANGE
ARTEP Page	7-45 Para	ARTEP Page	17-35 Para		
E-2-4 E-8-4	4 2	E-2-5 E-8-4	1 1	Bn/TF area defense, reserve company/Tm in a blocking role	A standard should be added which address task of the reserve company/Tm in a blocking if so employed.
E-2-4 E-8-4	4 2	E-2-5 E-8-4	1 1	Bn/TF area defense, counterattack	Provision should be made for evaluating attack rehearsal in the event counterattack not necessary to repel attack.
N/A	N/A	E-3-1 E-3-A	a 5	Tank Bn/TF, night occupation of an assembly area	General conditions should be modified to whether assembly area is located in a friendly area since standards call for a probe to aggressor. Delete the LOH from suggest
E-3-2 E-9-2	2 2	N/A	N/A	Night withdrawal and occupation of an assembly area, conduct passage of lines	As currently written, T&Es require a passage lines only in the delay. A passage of through friendly units should be conducted the night withdrawal mission also.
4-5 E-3-1 E-9-1 E-3-A E-9-A	1 1 3 3	N/A	N/A	Night withdrawal and occupation of an assembly area, aggressor activity	Conditions should be expanded to include aggressor detail and probing activity at the DLIC.
E-3-2 E-9-2	1b 1	N/A	N/A	Night withdrawal and occupation of an assembly area, actions of quarter- ing party	Standards should be expanded to include effectiveness of the quartering party in ing and guiding the unit into the assembly without halting, bunching, or confusion.
E-4-1 E-4-2 E-10-1 E-10-2	b(1) 4a b a	E-4-1 E-10-1	b b(2)	Tactical road march, primary training and evaluation standards	Standard which requires the unit to complete road march "in the allotted time" should be caveated to take into consideration any or CBR attacks occurring during the move introduce an aggressor roadblock, guerri or similar action. Mission to occupy an area at night should be included here in 17-35.

RECOMMENDED CHANGE

JUSTIFICATION

A standard should be added which addresses the task of the reserve company/Tm in a blocking role, if so employed.

Clarity and fairness, 9th ID AAR.

Provision should be made for evaluating counter-attack rehearsal in the event counterattack is not necessary to repel attack.

1st Cav Div AAR

- General conditions should be modified to clarify whether assembly area is located in a forward area since standards call for a probe by the aggressor. Delete the LOH from suggested support.

9th ID AAR.

Assembly
As currently written, T&Es require a passage of lines only in the delay. A passage of lines through friendly units should be conducted during the night withdrawal mission also.

9th ID AAR.

Assembly
Vity
Conditions should be expanded to include an aggressor detail and probing activity against the DLIC.

To add realism and exercise DLIC in performance of its mission. 9th ID AAR.

Assembly
Quarter-
Standards should be expanded to include the effectiveness of the quartering party in meeting and guiding the unit into the assembly area without halting, bunching, or confusion.

As currently written, the standard only requires that a quartering party be organized and dispatched but does not evaluate its effectiveness.
9th ID AAR.

Standard which requires the unit to complete the road march "in the allotted time" should be caveated to take into consideration any airstrike or CBR attacks occurring during the move. Also, introduce an aggressor roadblock, guerrilla attack or similar action. Mission to occupy an assembly area at night should be included here in ARTEP 17-35.

9th ID and 1st Cav Div AAR.

4-6

REFERENCE				SUBJECT	RECOMMENDED CHANGE
ARTEP Page	7-45 Para	ARTEP Page	17-35 Para		
N/A	N/A	E-4-a	3	Tank Bn/TF, night tactical road march	The aggressor detail should be deleted suggested support requirements for eva
N/A	N/A	E-4-2	2	Tank Bn/TF, night tactical road march	Standard requiring Bn/TF to plan for th ment of REDEYE should be examined to de whether REDEYE would be employed at nig
N/A	N/A	E-5-1	a.2	Tank Bn/TF, delay	General conditions should be examined t mine whether Bn/TF should be in assembl stated or in a defensive position when assigned.
E-6-2	2	E-6-2	2	Illuminated night attack	Standards should be expanded to require lion to secure the objective.
N/A	N/A	E-8-1	a	Tank company/team defense	General conditions should be examined to mine whether the aggressor forces should duced from a motorized rifle regiment to battalion.
N/A	N/A	E-14-1	a	Tank platoon, meeting engagement	General conditions should be examined to whether the reference to an attached mec infantry platoon should be deleted.
E-13-2	1	E-13-2	1	Hq & Hq Co, provide com- bat support and combat service support	Expand T&Es for the platoons in the Hq & pany to more nearly correspond to append through 10 in Annex D to ARTEP 17-35. A T&Es for TOC evaluation.
E-13-3	1	E-13-3	1		
E-13-4	1	E-13-4	1		
E-13-5	1	E-13-5	1		
E-14-3	1	E-14-2	Task 4	Fire support planning	Standards should be expended to address : platoon leader's knowledge of the fire su plan and their ability to use it.
E-15-2	1				
E-18-3	1				
E-14-2	Task 2	E-14-2	Task 3	Platoon, movement to contact (meeting engage- ment	Standards should include platoon taking a priate action if it is detected and broug Arty fire during movement to the objectiv

4-6

RECOMMENDED CHANGE

JUSTIFICATION

ctical	The aggressor detail should be deleted from the suggested support requirements for evaluation.	Standards do not mention actions of Bn upon being ambushed or attacked. 9th ID AAR.
ctical	Standard requiring Bn/TF to plan for the employment of REDEYE should be examined to determine whether REDEYE would be employed at night.	9th ID AAR.
	• General conditions should be examined to determine whether Bn/TF should be in assembly area as stated or in a defensive position when mission is assigned.	To add realism. 9th ID AAR.
ack	Standards should be expanded to require the battalion to secure the objective.	Clarity. 9th ID AAR.
	General conditions should be examined to determine whether the aggressor forces should be reduced from a motorized rifle regiment to a battalion.	Realism. 9th ID AAR.
	General conditions should be examined to determine whether the reference to an attached mechanized infantry platoon should be deleted.	Doctrine does not normally attach infantry at platoon level. 9th ID AAR.
com- at	Expand T&Es for the platoons in the Hq & Hq Company to more nearly correspond to appendices 6 through 10 in Annex D to ARTEP 17-35. Also add T&Es for TOC evaluation.	To better evaluate the performance of these elements. 9th ID and 1st Cav Div AAR's.
	Standards should be expended to address squad and platoon leader's knowledge of the fire support plan and their ability to use it.	9th ID AAR.
age-	Standards should include platoon taking appropriate action if it is detected and brought under Arty fire during movement to the objective.	9th ID AAR.

REFERENCE				SUBJECT	RECOMMENDED CHANGE
ARTEP Page	7-45 Para	ARTEP Page	17-35 Para		
E-14-A	11	E-14-A	11	Tips for Trainers/ Evaluators	Additional tip should be added that they will tell the platoon leader the approach and type of weapons fire which the platoon is receiving to aid the platoon leader in the situation.
E-14-1	a	E-14-1	a	General conditions	Add the sagger missile and the BMP to aggressor equipment list.
E-14-A	6	E-14-A	6	Platoon, movement to contact (meeting engagement)	Maneuver area for the route of advance changed from "1-5 km long" to "3-5 km". Consider changing to reduction of a route or other more measurable mission performance live fire and movement exercise.
E-15-A	3	N/A	N/A	Rifle platoon, area defense	Aggressor detail should be added.
4-7 E-16-1 E-16-2	b(2) 1	N/A	N/A	Rifle platoon, defense against aircraft	Number of passes of target aircraft should be changed from 5 to 10. Standards should be changed to cal. 50 mg and M60 mg to fire. Also 50 mg and M60 mg should receive a story evaluation.
E-17-2	1	N/A	N/A	Rifle platoon, night raid, dismounted	Standards should be revised to include leader's coordination for passage of line and proper execution of the passage of line by platoon as a part of the larger unit FT
E-18-1	Added	N/A	N/A	Rifle squad, movement to contact	A standard for land navigation should be added.
E-18-1 Note E-18-2 C 7 Note		N/A	N/A	Rifle squad, movement to contact (meeting engagement)	SCOPES exercise should include the squad, APC and M60 machine gun, and evaluators should simulate Arty and long range machine gun when the evaluated squad is seen at range beyond the capabilities of SCOPES.

RECOMMENDED CHANGE

JUSTIFICATION

Additional tip should be added that the evaluator will tell the platoon leader the approximate volume and type of weapons fire which the platoon is receiving to aid the platoon leader in estimating the situation.

9th ID AAR.

Add the sagger missile and the BMP to the aggressor equipment list.

9th ID AAR.

Maneuver area for the route of advance should be changed from "1-5 km long" to "3-5 km long." Also consider changing to reduction of a roadblock or other more measurable mission performance and adding live fire and movement exercise.

To add realism and better evaluation of platoon's ability to move tactically.

9th ID AAR.

Aggressor detail should be added.

To evaluate platoon's readiness for combat following preparation of defensive area.

9th ID AAR.

Number of passes of target aircraft should be changed from 5 to 10. Standards should require cal. 50 mg and M60 mg to fire. Also 5 hits of any type or shoot down should receive satisfactory evaluation.

In order to more fully evaluate platoon's firing techniques & 1st Cav Div AAR.

Standards should be revised to include platoon leader's coordination for passage of lines and proper execution of the passage of lines by the platoon as a part of the larger unit FTX.

9th ID AAR.

A standard for land navigation should be added.

9th ID AAR.

SCOPES exercise should include the squad's M113 APC and M60 machine gun, and evaluators should simulate Arty and long range machine gun fires when the evaluated squad is seen at ranges beyond the capabilities of SCOPES.

To increase realism by utilizing the TOE squad with all its weapons. 1st Cav Div ARR.

ARTEP Page	REFERENCE		17-35 Para	SUBJECT	RECOMMENDED CHANGE
	7-45 Para	ARTEP Page			
E-19-2	1	N/A	N/A	Rifle squad, recon patrol	Standards should be revised to include leader's coordination for a passage of and execution of the passage of lines squad as a part of larger unit FTX.
E-19-2	Added	N/A	N/A	Rifle squad, recon patrol conditions	Provide a minimum of 1 hour for the scout to plan his patrol.
E-19-A	2	N/A	N/A	Rifle squad, recon patrol	• The grade of the recommended evaluator should be reconsidered to determine whether an evaluator would not be more experienced than a scout on these missions.
E-20-A	2	N/A	N/A	Rifle squad, ambush patrol	
E-31-A	2	N/A	N/A	Rifle squad, forced march/live fire exercise	
E-20-2	1	N/A	N/A	Rifle squad, ambush patrol	Standards should be revised to include leader's coordination for a passage of execution of the passage of lines by the scout as a part of larger unit FTX.
E-21-2	2a	N/A	N/A	Rifle squad, forced march/live fire	Standards should be revised to accommodate squads of varying strengths, i.e., provide for varying percentage of targets to be hit or varying time limits for target engagement and for effects of weather and terrain for forced march. Requirement to fire using pair or volley fire should be eliminated.
E-22	Added	E-15	Added	Scout platoon	A new appendix should be developed to evaluate a scout squad's firing proficiency.
E-23	Added	E-16	Added		
E-22	Added	E-15	Added	Scout platoon	New appendices should be developed to evaluate the scout platoon's proficiency in execution of reconnaissance, area reconnaissance, and area security missions. The platoon should be evaluated on its ability to report on indirect fire, etc. These missions should be evaluated as a part of major unit FTX.
E-23	Added	E-16	Added		

RECOMMENDED CHANGE

JUSTIFICATION

Standards should be revised to include squad leader's coordination for a passage of lines and execution of the passage of lines by the squad as a part of larger unit FTX.

9th ID AAR

Provide a minimum of 1 hour for the squad leader to plan his patrol.

9th ID AAR.

- The grade of the recommended evaluator should be reconsidered to determine whether an E7 or E8 would not be more experienced than a Lieutenant on these missions.

9th ID AAR.

ise

Standards should be revised to include squad leader's coordination for a passage of lines and execution of the passage of lines by the squad as a part of larger unit FTX.

9th ID AAR.

Standards should be revised to accommodate squads of varying strengths, i.e., provide for varying percentage of targets to be hit or varying time limits for target engagement and for effects of weather and terrain on time for forced march. Requirement to fire LAWS using pair or volley fire should be eliminated.

Fairness. Some evaluated squads were composed of 6 men and mud slowed some squads' progress. 1st Cav Div AAR.

A new appendix should be developed to evaluate a scout squad's firing proficiency.

9th ID AAR.

New appendices should be developed to evaluate the scout platoon's proficiency in executing route reconnaissance, area reconnaissance, and rear area security missions. The platoon should also be evaluated on its ability to report intelligence, adjust indirect fire, etc. These missions should be evaluated as a part of major unit FTX.

9th ID and 1st Cav Div AAR.

REFERENCE				SUBJECT	RECOMMENDED CHANGE
ARTEP Page	7-45 Para	ARTEP Page	17-35 Para		
Added	Added	Added	Added	Scout platoon, M114 live fire	A new appendix should be written to p outline for live firing of M114 weapo scout crew.
E-24-3 E-25-3	1 1	E-17-1 N/A	1 N/A	Mortar platoon, provide indirect fire support	Reduce the times for initiating fire and firing final protective fire from and from <u>2</u> ' to <u>1</u> minutes respectively.
E-24-1 E-25-1	2 2	E-17-1	2	Heavy mortar platoon, 81mm mortar plt/sct, provide indirect fire support	Platoon leader should have the option "General Conditions" to either return platoon's assembly area following his of a firing position, or call the pla to the selected firing position.
E-24-2 E-25-2	2 2	E-17-2	2	Heavy mortar platoon, 81mm mortar plt/sct, occupy primary position in darkness	7 minute time interval between arrival position and readiness to fire during should be examined to see whether the be increased as recommended.
E-24-3 E-25-3	Added Added	E-17-2	Added	Illumination mission	Add standards for illumination and ill shift missions for mortars.
E-24-3 E-25-3	4 4	E-17-3	4	Heavy mortar platoon, 81mm mortar plt/sct, fire TOT mission	Consideration should be given to delet task for the mortar platoons' and to ad standard requiring a recon of firing p
E-24-3 E-25-3	5 5	E-17-3	5	Engage an area target without an FDC	FO should be required to position hims be able to direct fire without going t FDC or change mission to require displ squads and fire mission by squad leade
E-24-2 E-25-2	5 5	E-17-2	5	Heavy mortar platoon, 81mm mortar plt/sct, prevent enemy observa- tion of friendly move- ment	The smoke mission task should be moved last task in the mortar platoon's trai evaluation outlines.

RECOMMENDED CHANGE

JUSTIFICATION

A new appendix should be written to provide A T&E outline for live firing of M114 weapons by the scout crew.

9th ID AAR and FORSCOM LOI requirement.

Reduce the times for initiating fire for effect and firing final protective fire from 12 to 6 and from 2 to 1 minutes respectively.

9th ID AAR

Platoon leader should have the option in the "General Conditions" to either return to his platoon's assembly area following his selection of a firing position, or call the platoon forward to the selected firing position.

Adds realism. Allows the platoon leader to utilize time his platoon is on the move to coordinate with supported unit.

7 minute time interval between arrival at primary position and readiness to fire during darkness should be examined to see whether the time should be increased as recommended.

Many evaluators and evaluated commanders felt that 7 minutes was too short. The 9th ID after action report (AAR) suggested 10 minutes.

Add standards for illumination and illumination shift missions for mortars.

CATB recommendation.

Consideration should be given to deleting this task for the mortar platoons and to adding a standard requiring a recon of firing positions.

The 9th ID and 1st Cav Div AAR comment that TOT is not a normal mortar mission.

FO should be required to position himself so as to be able to direct fire without going through an FDC or change mission to require displacement by squads and fire mission by squad leader.

1st Cav Div AAR points out that range regulations prohibit FO from positioning himself within 100 meters of GT line.

The smoke mission task should be moved to the last task in the mortar platoon's training and evaluation outlines.

Evaluators followed the same sequence of tasks as listed in the T&E outlines. The smoke mission obscured the targets for the remaining tasks. 9th ID AAR.

		REFERENCE			
ARTEP Page	7-45 Para	ARTEP Page	17-35 Para	SUBJECT	RECOMMENDED CHANGE
E-26-3	A11	N/A	N/A	Antitank Squad (106RR)	The firing exercise should be related to situation. Use of night vision devices incorporated into standards.
E-26-A	9	N/A	N/A	Antitank Squad (106RR)	Additional ammo is needed for zeroing
E-26-2 E-26-3	A11	N/A	N/A	Antitank Squad (106RR)	Time standards are too lenient.
E-26-1	b	N/A	N/A	Antitank Squad (106RR)	Standards should include examination of ability to identify enemy armored vehicle similar to REDEYE exam.
E-27-3	1&2	N/A	N/A	Antitank Squad (TOW)	Change mode from "Practice" to "Qualify."
E-26-3	A11	N/A	N/A	Antitank Squad (106RR)	A determination should be made as to the ability of incorporating night vision devices into night firing of the RR and reducing number of subcaliber and 106RR rounds to target. Also the "E" and "F" silhouette should be replaced with more realistic point targets. Times should be reduced for targets through 4 to 2,2,2, and 4 minutes, respectively.
E-28-2	3&4	Added	Added	Crew firing, mech veh, (M113/M114) crew, driver/gunner, 50 cal. MG/20MM cannon live fire exercise	Standards should be revised so as to discourage firing single shot at point targets and encourage firing longer bursts for area coverage. Ammo allocation must be increased accordingly.
E-28-2	A11	Added	Added	" " " " " "	Revision of move out, ammo, times, loading procedure, and credit for area coverage is needed in standards.
E-28-2	3&4	Added	Added	" " " " " "	Standards should permit crew members to assist another if a problem occurs after both driver/gunner individually demonstrate their ability to set headspace and timing. Also, a barrel exercise should be added.

RECOMMENDED CHANGE

JUSTIFICATION

- R) The firing exercise should be related to a tactical CATB recommendation. situation. Use of night vision devices should be incorporated into standards.
- R) Additional ammo is needed for zeroing CATB recommendation.
- R) Time standards are too lenient. CATB recommendation
- R) Standards should include examination of crew's ability to identify enemy armored vehicles similar to REDEYE exam. 9th ID AAR.
- Change mode from "Practice" to "Qualify." CATB recommendation.
- R) A determination should be made as to the desirability of incorporating night vision devices into night firing of the RR and reducing the number of subcaliber and 106RR rounds to two per target. Also the "E" and "F" silhouette targets should be replaced with more realistic panel targets. Times should be reduced for tasks 1 through 4 to 2,2,2, and 4 minutes, respectively. To add realism and 1st Cav Div AAR.
- Standards should be revised so as to discourage firing single shot at point targets and encourage firing longer bursts for area coverage. Ammunition allocation must be increased accordingly. Doctrine. 9th ID and 1st Cav Div AAR.
- Revision of move out, ammunition, times, loading procedure, and credit for area coverage is needed in standards. CATB recommendation.
- Standards should permit crew members to assist one another if a problem occurs after both driver and gunner individually demonstrate their ability to set headspace and timing. Also, a barrel changing exercise should be added. Realism. 9th ID AAR.

REFERENCE				SUBJECT	RECOMMENDED CHANGE
ARTEP Page	7-45 Para	ARTEP Page	17-35 Para		
E-29-2	1	E-18-2	1	REDEYE team, provide air defense support	Standards should include mission performance of section headquarters and displacement between firing missions.
E-29-2	1	E-18-2	1	REDEYE team	Standard should be changed so that either gunner or the team leader remains in a status while the other conducts a map or recon.
E-29-2	2	E-18-2	2	REDEYE team	The condition which requires mounting the device when using the M49 trainer should be examined. Also standards of performance be established, e.g., destroy 2 of 3 target reel #7.
E-29-1	b(1)(2)	E-18-1	b(2)(a)	REDEYE team	Both the team leader and the gunner should fully engage 2 of 3 targets rather than as written.
E-29-1	b(3)(a)	E-18-1	b(3)(a)	REDEYE team	Both the team leader and the gunner should fully recognize 90% of the aircraft slides than either/or as written.
E-29-2	1	E-18-2	1	REDEYE team	The standard should be rewritten to require firer to displace from the primary to an alternate position after firing.
E-29-3	1	E-18-3	1	REDEYE team	Conditions should include instructions for the projectionist to announce "aircraft" as each is projected and for controlling the flight of the target aircraft during REDEYE evaluation with the tracking head trainer.
E-29-3	General	E-18-3	General	REDEYE team	Slides depicting aircraft with multiple detonations should be removed from GOAR kit.

RECOMMENDED CHANGE

JUSTIFICATION

air

Standards should include mission performance duties 9th ID and 1st Cav Div AAR. of section headquarters and displacement between between firing missions.

Standard should be changed so that either the gunner or the team leader remains in a ready status while the other conducts a map or ground recon.

Doctrine. 9th ID and 1st Cav Div AAR.

The condition which requires mounting the TVT device when using the M49 trainer should be re-examined. Also standards of performance should be established, e.g., destroy 2 of 3 targets from reel #7.

Mounting the TVT device unbalances it. The device can best be employed to record firer's head and hand movements during acquisition.

Both the team leader and the gunner should successfully engage 2 of 3 targets rather than either/or as written.

Both crew members must be capable of successfully engaging targets. 9th ID AAR.

Both the team leader and the gunner should successfully recognize 90% of the aircraft slides rather than either/or as written.

Both crew members must be capable of recognizing targets before engaging them. 9th ID AAR.

The standard should be rewritten to require the firer to displace from the primary to an alternate position after firing.

Realism. 9th ID AAR.

Conditions should include instructions for projectionist to announce "aircraft" as each slide is projected and for controlling the flight path of the target aircraft during REDEYE evaluation with the tracking head trainer.

To signal both evaluator and leader/gunner that timing has begun for recognition.

Slides depicting aircraft with multiple designations should be removed from GOAR kit.

Purpose is to test leader's/gunner's ability to recognize aircraft as friendly or enemy and not to test his knowledge of multiple aircraft designations.

REFERENCE				SUBJECT	RECOMMENDED CHANGE
ARTEP Page	7-45 Para	ARTEP Page	17-35 Para		
E-29-3	General	E-18-3	General	REDEYE team	Standard aircraft recognition cards from 44-2-1 should be included.
E-30-1	b(2)	E-19-1	b(2)	Ground surveillance team,	Standards should require team to report 1 azimuth and range to target in sector. 1 to differences in AN/PPS-4 and 5, range 1 the targets should be left to the discretion of the evaluators. Exercise should become tactical and not just technical.
E-30-2	2(b)	E-19-2	2(b)	provide ground surveillance support	
E-30-A	11	E-19-A	1	Tips for evaluators/trainers	Caution should be listed that subtest should be conducted in an area where the target will not be inadvertently altered and will be pretested by radar.
E-31-2	1,3,4	E-20-2	1,3,4	Tank crew, demonstrate	The standards which designate targets as Cal. .50 or COAX should be changed so that the only stipulation is that they be machine targets.
E-31-3	2,3	E-20-3	2,3	firing proficiency, night	
E-21-1	b(1)	E-20-1	b(1)	" " " " " "	The primary standard which requires that 1 of 8 opening times be met should be changed to read 6 out of 8.
E-31-2	1,5	E-20-2	1,5	" " " " " "	The opening times for firing on targets indicated by infrared should be examined and extended.
E-31-3	2	E-20-3	2	" " " " " "	
E-31	A11	E-20	A11	Tank crew, demonstrate firing proficiency (night)	Reexamine entire T&E outline. Should ARTEP evaluation duplicate annual tank gunnery TCQC Table VIII B? If not, wouldn't a live fire course be more appropriate? If shouldn't the two have identical standards conditions? Currently, scoring and infrared sight usage are different.

4-12

RECOMMENDED CHANGE

JUSTIFICATION

Standard aircraft recognition cards from GTA 44-2-1 should be included.

1st Cav Div AAR.

am, Standards should require team to report both azimuth and range to target in sector. Due to differences in AN/PPS-4 and 5, range to the targets should be left to the discretion of the evaluators. Exercise should become tactical and not just technical.

9th ID AAR.

Caution should be listed that subtest should be conducted in an area where the target arrays will not be inadvertently altered and will be pretested by radar.

1st Cav Div AAR.

ght The standards which designate targets as either Cal. .50 or COAX should be changed so that the only stipulation is that they be machine gun targets.

9th ID AAR.

The primary standard which requires that 7 out of 8 opening times be met should be changed to read 6 out of 8.

9th ID AAR.

The opening times for firing on targets illuminated by infrared should be examined and extended.

9th ID AAR.

Reexamine entire T&E outline. Should ARTEP evaluation duplicate annual tank gunnery TCQC Table VIII B? If not, wouldn't a platoon live fire course be more appropriate? If so, shouldn't the two have identical standards and conditions? Currently, scoring and infrared sight usage are different.

Questions raised by 9th ID unit being evaluated.

REFERENCE				SUBJECT	RECOMMENDED CHANGE
ARTEP Page	7-45 Para	ARTEP Page	17-35 Para		
					Should battle sites be employed if no road is carried in chamber? Should personnel targets be illuminated with infrared? Should a live exercise precede the night evaluation? Should a unit be required to make a tactical road march prior to live firing due to effect of movement with tubes out of travel lock on zero of weapon? Should 1st round hits end mission bonus points for unused ammo?
E-31	All	E-20	All	Tank crew, demonstrate firing proficiency (night)	The scoring system for the live firing exercise should be revised so as to be of more direct assistance to commanders.
E-31-A	9	E-20-A	9	Tank crew, demonstrate firing proficiency (night)	Additional ammunition is required for zeroing main gun.
4-13 Added Added	Added Added	Added	Added	Wheel vehicle Cal. .50 MG live fire	An appendix should be added which provide outlines for live firing of wheel vehicle mounted Cal. .50 machine guns.
H-4	3g(3)	H-3	4b	Concurrent Evaluation	Test planners should be cautioned as to the difficulties that must be overcome when integrating subtests into the battalion field training exercise.
H	General H	General	Casualty and damage assessment		There appears to be a need for specific guidance for evaluator/controllers on casualty and assessment.

RECOMMENDED CHANGE

JUSTIFICATION

Should battle sites be employed if no round is carried in changer? Should personnel targets be illuminated with infrared? Should a day exercise precede the night evaluation? Should unit be required to make a tactical road march prior to live firing due to effect of moving with tubes out of travel lock on zero of weapon? Should 1st round hits end mission with bonus points for unused ammo?

The scoring system for the live firing exercise should be revised so as to be of more diagnostic assistance to commanders.

Additional ammunition is required for zeroing main gun.

An appendix should be added which provides T&E outlines for live firing of wheel vehicle mounted Cal. .50 machine guns.

Test planners should be cautioned as to the difficulties that must be overcome when integrating subtests into the battalion field training exercise.

There appears to be a need for specific guidance for evaluator/controllers on casualty and damage assessment.

The current scoring system does not provide sufficient diagnostic information for purposes of identifying training deficiencies. Bd. Cdr of evaluated Bn.

Zero of weapon may be thrown off during field exercise and require more than the one warm up round currently authorized to re-zero weapon. 9th ID and 1st Cav Div AAR.

9th ID AAR.

9th ID AAR.

Realism. In 9th ID validation of ARTEP, evaluated unit commanders were not informed until the end of the mission as to the number of casualties and damage they had suffered.

<u>ARTEP</u> <u>Page</u>	<u>REFERENCE</u>		<u>ARTEP</u> <u>Page</u>	<u>17-35</u> <u>Para</u>	<u>SUBJECT</u>	<u>RECOMMENDED CHANGE</u>
	<u>7-45</u> <u>Para</u>					
H-9	1	Added	Added		Summary of evaluator personnel requirements	The minimum number of suggested evaluator personnel, while high, is not high enough. The 9th ID suggests an increase from 87 to 134 for concurrent and 108 for the consecutive method of evaluation for ARTEP 7-45 and from 91 to 106 for concurrent and 95 for the consecutive method for ARTEP 17-35. Also, 1st Cav Div suggests adding this information to ARTEP 17-35.
H-11	All	Added	Added		Summary of ammunition	Requires recomputation.
H-1-11	Added	H-1-3	Added		Using ARTEP for evaluation and training	Annex H should be expanded for company, platoon, and squad level training to include intermediate objectives, training reference equipment requirements, training aids, and training guidance to include follow-up program to determine status of retraining/testing of areas found lacking in formal Bn evaluation.

47-4

RECOMMENDED CHANGE

The minimum number of suggested evaluator personnel, while high, is not high enough. The 9th ID suggests an increase from 87 to 134 for concurrent and 108 for the consecutive method of evaluation for ARTEP 7-45 and from 91 to 106 for concurrent and 95 for the consecutive method for ARTEP 17-35. Also, 1st Cav Div suggests adding this information to ARTEP 17-35.

Requires recomputation.

Annex H should be expanded for company, platoon, and squad level training to include intermediate objectives, training references, equipment requirements, training aids, and training guidance to include follow-up program to determine status of retraining/testing of areas found lacking in formal Bn evaluation.

JUSTIFICATION

9th ID and 1st Cav Div AAR.

CATB recommendation.

Comments from users during 9th ID validation and 1st Cav Div AAR.